

STUDENT SUCCESS: A DESCRIPTIVE ANALYSIS OF HISPANIC STUDENTS
AND ENGAGEMENT AT A MIDWEST HISPANIC-SERVING INSTITUTION

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by

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Abstract

The purpose of this study was to learn more about the Hispanic students attending Northeastern Illinois University, a four-year institution in Chicago, IL, and their student success. Little is known descriptively and statistically about this population at NEIU, which serves as a Hispanic-Serving Institution. In addition, little is known about which Hispanic students succeed and which do not. For this study, student success is measured in terms of grade point average and freshman retention. In addition, this research reviewed the relationship between Hispanic student success and student engagement. Student engagement is commonly linked to student success and can help researchers learn how NEIU Hispanic students are succeeding or not succeeding. The research found that student engagement did not have a relationship to student success for Hispanic students when considering GPA and freshmen retention rates. Further, the research illustrated that additional intentional opportunities for student engagement must be developed in order to assist in Hispanic student success.

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Chapter 1

INTRODUCTION TO THE STUDY

Northeastern Illinois (NEIU) is a four-year Masters level institution located in Northern Chicago, Illinois experiences some challenges in student success. According to the *US News and World Report*, 2010 edition, NEIU has the most diverse student population in the Midwest. The Midwest is comprised of the following twelve states: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota and Wisconsin. The student population is diverse not only in terms of race/ethnicity, but also in terms of age, socio-economic status, and academic preparation. The diversity of students brings about an intense range of student needs and challenges including retention and academic performance.

Northeastern Illinois University serves 100% commuter students and enrolls more than 5,777 full-time and 5,854 part-time undergraduate and graduate students (NEIU Profile Report, 2009). In addition, NEIU's student population is comprised of more than 27% Hispanic students and is labeled an Hispanic Serving Institution, a federal designation for institutions with over 25% Hispanic student enrollment. One of the greatest challenges Northeastern Illinois University faces is addressing student retention. The retention rate in 2009, the year this research is reviewing, was 68.9% from freshman to sophomore year (www.neiu.edu/~isp). In comparison, the national retention rate was 76% (www.higheredinfo.org). In order to improve the retention rate of students attending NEIU, it is important to learn more about their students and what leads them to academic success or failure.

By the year 2020, it is projected that 39% of the American population will be comprised of people of color, with the largest growth stemming from the Hispanic population (U.S. Census Bureau, 2004). Hispanics in the U.S. continue to grow in number however they are not being educated at the same rate as their growth. The gap between the population growth and their educational attainment is widening, not closing, and in order to for this population to successfully enter the work force, the gap must begin to close (Kelly et al., 2010). Hispanics continue to struggle with high school and college completion and are lagging six to eight percentage points behind their white counterparts (Kelly et al., 2010). If Hispanics are to continue growing in population and become a larger proportion of the work force, it is critical that they be adequately educated.

Purpose of Study

The purpose of this study is to learn more about the Hispanic students attending Northeastern Illinois University and their student success. Little is known descriptively and statistically about this population at NEIU. In addition, little is known about which Hispanic students succeed and which do not. For this study, student success is measured in terms of grade point average and freshman retention.

In addition, this research will review the relationship between Hispanic student success and student engagement. Student engagement is defined as the amount of time and energy students invest in educationally purposeful activities and the effort institutions devote to using effective educational practices (Kuh et al., 2008). Student engagement is commonly linked to student success and can help researchers learn how NEIU Hispanic students are succeeding or not succeeding.

Student engagement has been measured at NEIU through the National Survey of Student Engagement (NSSE). The NSSE surveys both freshman and seniors (www.nsse.iub.edu). The NSSE has been administered at Northeastern Illinois University over a period of time and for the purposes of this research, the 2010 data is utilized since it includes the largest number of respondents. NSSE is organized into five Benchmarks of Effective Educational Practice, which help capture critical pieces of the student experience (Kuh and Gonyea, 2009; Kuh et al., 2001). All questions in the survey are framed around the following five benchmarks: Level of Academic Challenge, Active and Collaborative Learning, Student-Faculty Interaction, Enriching Educational Experiences and Supportive Campus Environment.

The survey items ask about empirically confirmed “good practices” in undergraduate education (Kuh et al., 2006). Student engagement has been linked with retention, student learning as measured through GPA and graduation. For the purpose of this study, graduation is not studied due to the low six-year graduation rate of 20.1% for all students and 16.6% for Hispanic students attending NEIU (www.neiu.edu/~isp).

NSSE has been utilized to assess and account for teaching and learning in higher education (Gonyea and Kuh, 2009). In addition, student engagement as measured through NSSE has a statistically significant effect on first-year grades and retention for first year students (Kuh et al, 2006b; Kuh et al, 2008; Pascarella et al., 2010). Student engagement theory therefore calls for more interaction and exposure to educationally purposeful activities that will in the long-term lead to great student success (Pascarella et al, 2010).

Research Questions

The purpose of this study is to learn more descriptively about Hispanic students attending NEIU and to provide a more in depth examination of Hispanic freshmen and seniors surveyed through the NSSE. Hispanic students are divided into freshmen and senior cohorts, given these are the two groups who complete the NSSE. In addition, White students are used as a comparison group. White students are typically found to have higher persistence rates than Hispanics students and the comparison helps to further provide context to answer if and how Hispanic students are succeeding academically (Dadashova et al, 2010; Laird et al., 2007).

In order to learn more about Hispanic students attending Northeastern Illinois University, this study answered the following questions:

1. In 2010, what were the descriptive characteristics of undergraduate Hispanic students attending NEIU who completed the NSSE?
2. Is there a statistical difference in engagement between all freshmen and all seniors?
3. Is there a statistical difference in engagement between Hispanic freshmen and White freshmen?
4. Is there a statistical difference in engagement between Hispanic seniors and White seniors?
5. For all freshmen who completed the 2010 NSSE survey, controlling for relevant demographic variables, what is the relationship between the five NSSE benchmarks and their cumulative NEIU grade point average?

6. For all seniors who completed the 2010 NSSE survey, controlling for relevant demographic variables, what is the relationship between the five NSSE benchmarks and their cumulative NEIU grade point average?
7. For Hispanic freshmen who completed the 2010 NSSE survey, controlling for relevant demographic variables, what is the relationship between the five NSSE benchmarks and their cumulative NEIU grade point average?
8. For Hispanic seniors who completed the 2010 NSSE survey, controlling for relevant demographic variables, what is the relationship between the five NSSE benchmarks and their cumulative NEIU grade point average?
9. For White freshmen who completed the 2010 NSSE survey, controlling for relevant demographic variables, what is the relationship between the five NSSE benchmarks and their cumulative NEIU grade point average?
10. For White seniors who completed the 2010 NSSE survey, controlling for relevant demographic variables, what is the relationship between the five NSSE benchmarks and their cumulative NEIU grade point average?
11. For freshmen who completed the 2010 NSSE survey, controlling for relevant demographic variables, what is the relationship between the five NSSE benchmarks and student retention the following year (Fall 2010)?
12. For Hispanic freshmen who completed the 2010 NSSE survey, controlling for relevant demographic variables, what is the relationship between the five NSSE benchmarks and student retention the following year (Fall 2010)?

13. For White freshmen who completed the 2010 NSSE survey, controlling for relevant demographic variables, what is the relationship between the five NSSE benchmarks and student retention the following year (Fall 2010)?

Importance of Study

This study is important because the Hispanic population in America continues to grow and Northeastern Illinois University serves a major role in the education and completion rates of Hispanics. While it is certain that the population level of Hispanics will continue to grow, it is uncertain if their college completion rates will also improve, helping them to successfully enter the work force (Kelly et al., 2010). The influx of Hispanics in education will most certainly continue to reach NEIU's doors and this research could assist Northeastern in learning how to address the needs of its Hispanic students. Institutional improvements created to serve Hispanic students have also been found to help non-Hispanic students attending an HSI. Thus the findings of this research will serve all students attending Northeastern thus creating opportunities for student success for everyone (Kelly et al., 2010).

It is important to learn more about the Hispanic students attending Northeastern Illinois University and learn if their student engagement levels have a relationship with student success. It is also important because currently the success level of Hispanic students is below where it needs to be – their six-year graduation rate is only 16% and the freshman retention rate is lower than it is for other groups on campus. Since Hispanic students make up such a large percentage of the student population at NEIU, it is imperative that the institution comes to terms with who these students are and the factors that predict their success or failure in order to better serve them.

Chapter 2

LITERATURE REVIEW OF HISPANIC STUDENTS AND STUDENT ENGAGEMENT

The focus of this research revolved around two key areas: the Hispanic student and student engagement. Therefore it was critical before delving into the data analysis of the Hispanic student attending NEIU to learn more about student engagement theory, its history and present status in the research. This chapter will discuss the current status of Hispanics in higher education and the evolution of Hispanic-Serving Institutions such as Northeastern Illinois University. Also, there will be a discussion on the important political roles Hispanics and HSI's have taken since the 1980s and how the government has helped shape the future configuration and funding of HSI's under Title V, enabling these institutions to have additional funding resources to provide support programs. Further, this chapter will share the little known research on HSI's and student engagement and share the challenges that Hispanic students are still facing within higher education today including low college enrollment, and low retention rates.

Next, the review will transition to student engagement theory, previous theories that helped shape Kuh's engagement theory, the National Survey on Student Engagement (NSSE) and how it assists universities and colleges in improving their practices by providing data and benchmarks that measure student success. Finally, the layout of the survey and the five benchmarks that are being used to answer the research questions will be discussed.

Hispanics in Education

While the higher education landscape has continued to become more diverse, there are still large gaps between the educational attainment level underrepresented groups such as Hispanics and their White counterparts. There remain large gaps between college readiness between Whites and Hispanics, with only 33% of Hispanics achieving college-level reading skills (Kuh et al., 2006). Hispanics are now the nation's largest minority group, with nearly one in four under the age of 18 being Hispanic (Brennan, 2011). According to the 2010 U.S. Census, Hispanic or Latino is defined as persons of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origins regardless of race (Ennis et al., p. 2, 2011). Hispanics represent a large and diverse group of people of different ages, genders, nationalities and citizenship. The two things that remain common among this large group are that Hispanics represent a great potential vital to the nation's future and second, most of this talent is not being tapped, mainly because of the low level of educational attainment (Brennan, 2011). The 2010 census reports 308.7 million people reside in the U.S., of which 50.5 million (16%) are of Hispanic or Latino origin, an increase from 35.3 million in 2000 (Ennis et al., 2011). The Hispanic population increased by 15.2 million in just ten years and accounted for over half of the 27.3 million gain in the total U.S. population. The Hispanic growth in the Midwest increased by 49%, more than twelve times the growth of the total population in the Midwest (Ennis et al., 2011).

According to the last U.S. census, the Hispanic population increase in Illinois was 497,316, more than the overall state growth of 411,339, showing that the Hispanic population was the largest contributor to Illinois growth as a state (Ennis et al., 2011).

Chicago was ranked fifth among all states with the highest number and percentage of Hispanics or Latinos in 2010, with a total 778,862 Hispanics out of the state total population of 2,695,598 (Ennis et al., 2011). With a growing Hispanic population across the U.S. and in the Midwest, the educational landscape will also face large changes in terms of its student make-up and graduation challenges.

Hispanics in the U.S. enrolled in college also had a large gain from 2000 to 2009 (see Table 1). Of Hispanics ages 18-19, 57.1% were enrolled in college as compared to 49.5% in 2000 (Snyder et al., 2011). In terms of undergraduate enrollment, Hispanic enrollment grew five-fold from 1976 to 2009 (4% to 13%). From 2000 to 2009, Hispanic enrollment grew from 10% to 13% (Aud et al., 2011). On average, 51% of Hispanics in the U.S. complete their bachelor's degree in six years, compared to 59% of Whites (Kelly et al., 2010).

Table 1

Total Undergraduate Enrollment and Percentage Distribution of Students in Degree-granting Institutions by race/ethnicity. Selected years, 2000 and 2009 (measured in thousands)

	2000	2009	2000	2009	% Change
White	8983	10915	68.3%	62.1%	-6.2%
Black	1549	2577	11.8%	14.7%	+2.9%
Hispanic	1351	2362	10.3%	13.4%	+3.1%
Asian	846	1142	6.4%	6.5%	+0.1

SOURCE: U.S. Department of Education, National Center for Education Statistics, Higher Education General Information Survey (HEGIS), "Fall Enrollment in Colleges and Universities" surveys, 1976 through 1980; 1990 through 2009 Integrated Postsecondary Education Data System, "Fall Enrollment Survey" (IPEDS-EF:90-99), Spring 2001 through Spring 2010; and Enrollment in Degree-Granting Institutions Model, 1980-2009.

Another study shows from 1994 to 2004, the percentage change of Hispanics enrolled as undergraduates was 236.6%, outnumbering both the minority growth rate which was 145.7% and overall undergraduate growth rate of only 39.3% (Li, 2007). Although the Hispanic population and college enrollment has increased, educational attainment levels of Hispanic student still lag behind their White counterparts. According to 2008 data for Illinois, 59% of Hispanics 25 years or older have completed high school or higher, compared to 90.8% Whites, 81% Blacks and 90.7% Asian (Aud et al., 2011). In addition, only 11.4% of Hispanics in Illinois have a bachelor's degree or higher, compared to 29.5% Whites, 32.8% Blacks, 61.6% Asians (Aud et al., 2011). Hispanics in Illinois still face a large gap in educational attainment in comparison to the large gains in the U.S. Census and undergraduate enrollment, which is critical to Northeastern Illinois University given the majority of its student enrollment are residents of Illinois. This data shows that while the Hispanic population has grown, the high school graduation rate and college attainment rates still lag behind those of other ethnic groups.

Hispanic graduation rates vary according the selectivity of institutions they attend. As mentioned earlier, the graduation rates of Hispanic students attending Northeastern Illinois University was a low 16.6%, a similar problem found at other universities. The six admission selectivity categories according to *Barron's Profile of American Colleges* are non-competitive, less competitive, competitive, very competitive, highly competitive, and most competitive (Kelly et al., 2010). Hispanic students are overrepresented in the lowest three selectivity categories (non-competitive, less competitive and competitive) and underrepresented in the three highest. This 'undermatched' distribution is described as:

Hispanics choose colleges and universities that are less selective and academically rigorous than other schools that these students are qualified to attend. Students who undermatch have a lower probability of completing a bachelor's degree than similarly qualified peers who attend more selective institutions. (Kelly et al., p. 6, 2010)

According to data from the National Center for Education Statistics, Hispanic students consistently lag behind their White counterparts in attendance at all six selectivity categories, ranging from 27.1% vs. 35.6% (Hispanic vs. White) at noncompetitive to 82.8% to 89.1% at most competitive (Snyder et al., 2009; Kelly et al., 2010).

With the increasing numbers of Hispanic students in higher education and at Northeastern Illinois University, challenges facing this population haven't changed much since the 1990s. Hispanic students are still found to be at risk for failing to complete a postsecondary program, even after the creation of HSI's which were thought would greatly help the graduation gap between Hispanic students and White students (O'Brien and Zudak, 1998). "Despite the presence of HSI's, overall college participation and completion rates for Hispanics continue to lag behind other student groups" (Laden, 2004, p. 191). Hispanics were still found to have lower graduation rates at HSI's, with an overall graduation rate of 38.6%, compared to 44.4% at non-HSI's (Kelly et al., 2010). The only selectivity category Hispanics surpassed White student graduation rates was in very competitive HSI's, graduating at 53.2% Hispanics compared to 48.2% graduation rates of Whites (Kelly et al., 2010). Overall, the gap between Hispanic graduation and White graduation rates at Hispanic-Serving Institutions is smaller, not due to the fact that more Hispanics are graduating, but rather due to the fact that both populations are below-

average (Kelly et al., 2010). Hispanic women consistently graduate at higher rates than their male counterparts (between 5-9% points higher) and graduate at a similar rate of White males at their schools (Kelly et al., 2010).

A study in 2008 found a greater proportion of Hispanic students enrolled at Minority Serving Institutions such as Northeastern Illinois University, compared to those attending non-MSI's, were age 24 or older (53% vs. 30% at non-MSI's), single parents (21% vs. 8%), had a delayed entry into college more than a year after high school graduation (38% vs. 26%), and worked full-time while enrolled (41% vs. 30%) (Li, 2007).

Overall, regardless of which type of institution they attend, Hispanic students are often financially independent, are enrolled in colleges near where they live, attend college part-time, commute to college, work a high proportion of hours, and have many family obligations (Laden, 2004; Garcia et al., 2004; Kuh et al., 2006, Li, 2007). They are also first-generation students, come from low socio-economic backgrounds and have lower academic preparation than their peers (Garcia et al., 2004; Kuh et al., 2006).

According to research in 2006, more than 42% of Hispanic students were first generation college students versus only 18% of White students (Kuh et al., 2006). First generation students tend to have less developed time management skills, less experience navigating the bureaucratic processes, and less knowledge in general about higher education, making it that much more difficult for first generation students to succeed (Kuh et al., 2006; Kelly et al., 2010). This information deficit results in the low retention rates of Hispanic students, and Hispanic students and their families often suffer from lack of information about the cost of college, policies, financial borrowing, and selecting the

college they are qualified to attend (Kuh et al., 2006, Kelly et al., 2010). “Better counseling about financial aid also would likely lower the rate at which Hispanic students drop out of college for financial reasons” (Kelly et al., p. 6, 2010).

Hispanic-Serving Institutions

The increased enrollment in minority students across college campuses reflects the change in demographics of the overall U.S. population (Li, 2007; Laden, 2004). With this change came an expansion of Minority Serving Institutions (MSI’s), which more than tripled from 414 institutions in 1984 to 1,254 in 2004 (Li, 2007). This growth of MSI’s resulted primarily from two subgroups: Hispanic-Serving Institutions and Black-Serving non-HBCU’s (Li, 2007).

Minority Serving Institutions (MSI’s), such as Hispanic-Serving Institutions, play a unique role in higher education because they educate more than one-third of the nation’s students of color, a group that is on the rise and needs more attention from researchers and administrators today (Cook and Cordova, 2006). While minority students are considered more likely than their White counterparts to struggle with academic problems and cultural immersion, MSI’s filled in the gap by providing an atmosphere of support, comfort and culturally aware programs to serve their underrepresented groups (Laden, 2004). All MSI’s have two things in common. One, they all provide educational opportunities to underrepresented populations. Second, all three groups enroll a disproportionately high percentage of African American, American Indian or Hispanic students (O’Brien and Zudak, 1998). With these higher percentages come larger challenges, including retention and graduation rates of minority students.

It is imperative that MSI's attend to these issues as they continue to lead students of color through their higher education experience. While all students enrolled in colleges and universities face impediments to persistence and completion of degree, MSI's in particular need to seek opportunities to engage the students they serve in educationally appropriate behaviors and tasks. (Del Rios and Leegwater, 2008, p. 13)

Hispanic-Serving Institutions, such as Northeastern Illinois University, have grown in the United States while other MSI's such as Historically Black Colleges and Universities have declined (Del Rios and Leegwater, 2008). While the Hispanic population has its challenges, HSI's as institutions of higher learning also face their share of challenges. Becoming an HSI is entirely a function of enrollment, not the institution's performance on outcomes such as student retention and graduation (Kelly et al., 2010). HSI's commonly face challenges of a public, urban and commuter campus (Garcia et al., 2004). They commonly enroll students who are recent graduates and returning adults, which have inadequate high school preparation for college academia. HSI's face limited financial resources and are limited in state and federal sources. Lastly, due to financial challenges, these institutions also face limited institutional support for faculty participating in research hindering the instructional quality.

In spite of their challenges, HSI's will continue to face the important role in serving the majority of Hispanic students in the U.S. The growth of the Hispanic student has played an important role in the creation of HSI's in America and Puerto Rico, but Hispanics were not always enrolled in higher education as they are today. In the late 1960s and early 1970s, Chicano and Puerto Rican colleges were founded, but remained

largely underfunded (MacDonald et al., 2007). These Latino colleges could not keep up with HBCU's due to limited funding and challenges with accreditation. Faculty salaries were low and enrollment began to sharply decline when students couldn't afford to attend. By 1983, more than a dozen Chicano and Puerto Rican colleges had closed, slowing down the momentum for Hispanics in higher education. In 1983, only one HSI remained, Deganawidah-Quetzalcoatl, which was later incorporated as a Tribal College. Puerto Rican colleges were more successful at keeping their doors open, while other Latino colleges were closing for various reasons (MacDonald et al., 2007).

During the mid 1980s, philanthropies started to acknowledge the Hispanic population's educational needs and foundations such as Ford, Carnegie and Rockefeller began developing grants and other funding opportunities for Latinos. The Ford Foundation was instrumental in the creation of MALDEF, the Mexican American Defense Education Fund (MacDonald et al., 2007), which has helped support access and opportunity for Latinos, similar to the NAACP's work for African Americans.

While the Hispanic population was on the rise, in the 1980s, Hispanics began to enroll less in higher education. College enrollment for Hispanics decreased from 35.4% in 1975 to 27% in 1985 (MacDonald et al., 2007; Brennan, 2011). Hispanic student enrollment decline was attributed to the decrease in grant programs and emphasis on student loans, a concept Hispanic families were not comfortable with (MacDonald et al., 2007). Due to all the worries and concerns regarding the federal governments initiatives with the Hispanic population, a group of Latino leaders united to mobilize the Hispanic movement in education, thus the creation of the Hispanic Association of Colleges and Universities in 1986. (MacDonald et al., 2007; Laden, 2004).

Taken from the civil rights movements and the mobilization of farm workers through Cesar Chavez, HACU collaborated to lobby and leverage for educational reform, with the purpose of increasing Hispanic educational attainment rates (Laden, 2004).

The new organization's goal was to draw national attention to the social, economic, and educational needs of Latinos, and their increasing attendance in certain colleges and universities. The specific aims were to improve educational access, raise the quality of college opportunities for Latinos, and draw the attention of national political figures and educational policy makers. (Laden, 2004, p. 189)

HACU was instrumental in both the federal designation of HSI's in the 1994 Higher Education Act, and also in the access to Title V funding through the reauthorization in 1998. Shortly after its founding in 1986, HACU had already begun defining Hispanic-Serving Institutions and had itself identified 78 institutions; this number rose to 125 institutions by 1994 thus making HSI's the largest Minority Serving Institution category and enrolling 42% of all Hispanic students (HACU, 1996; O'Brien and Zudak, 1998; Laden, 2004). Northeastern Illinois University was identified as a HSI in the early 1990s. While HACU fought to include HSI's in the U.S. Higher Education Act of 1994, HACU uses a modified version to identify Hispanic-Serving Institutions (Laden, 2004). HACU identifies HSI's as institutions that have 25% enrollment of Hispanic students, regardless of full or part-time enrollment, which is a different definition than the federal governments. With HACU, postsecondary colleges and universities can apply for full membership based on this criterion or can apply as associate members if they enroll a minimum of 1000 Hispanic students.

Due to the influence of Hispanic leaders within HACU, the federal government finally created the official designation for Hispanic-Serving Institutions and defined them as degree-granting, public or private, non-profit higher education institutions that held a 25% or higher full time Hispanic enrollment at the undergraduate level (Laden, 2004; Bridges et al., 2005). Due to HACU and other political agents, the federal government created the Hispanic Serving Institution category in the Higher Education Act of 1994. Under Title III, HSI's were defined as accredited degree granting, public or private, nonprofit colleges and universities with 25% or more total undergraduate Hispanic student enrollment (Laden, 2004; Kelly et al., 2010). In 1998, the Higher Education Act reauthorized HSI's under Title V and narrowed its definition to accredited, degree-granting, public or private, nonprofit colleges and universities with 25% or more total undergraduate full-time equivalent Hispanic student enrollment. The difference between both acts is the emphasis on full time enrollment but also the change from being categorized as Title III to Title V (Laden, 2004; Bridges et al., 2005).

One of the most significant changes between the 1994 and 1998 HEA reauthorization was allowing HSI's to apply for federal funds that had only been previously available to Historically Black Colleges and Universities (HBCU's) and Tribal Colleges and Universities (TCU's) under Title III. While HBCU's and TCU's received Title III funding early in their history, it wasn't until the reauthorization of 1998 that opened the doors to HSI's and federal financial support through grants. In order to qualify for Title III grants, a minimum of 50% of HSI's Latino students must meet the poverty level set by the Bureau of the Census (White House Initiative 2001 found in Laden, 2004). This requirement was later changed as supporters of HSI's urged for three

areas of reform of the 1998 HEA reauthorization. The first reform led to significant changes for HSI, including eliminating the full-time enrollment requirement in identifying the number of Hispanic students since most Hispanic students can only afford to attend part-time (MacDonald et al., 2007). The second change was Congress eliminating the requirement that 50% of Hispanic students attending HSI's need to qualify as both low-income and first generation students, thus allowing more institutions to qualify as HSI's. Lastly, reformers fought to have an increasing in funding, considering the Hispanic enrollment was growing at quicker and larger rates than other MSI's funding in Title III (www.HACU.net; MacDonald et al., 2007; Kelly et al., 2010).

Through the separate designation of Title V, the Latino community had finally established a distinct identity within federal discussion of higher education. No longer was the Latino experience simply blended with the unique narratives of African Americans or Native Americans in the unwieldy categorization of Title III; rather, Hispanics had at last been granted their own space to confront the particular challenges that faced them in higher education. (MacDonald et al., p. 497, 2007)

Now that an expanded federal designation of Hispanic Serving Institution was in place, many institutions were becoming identified as HSI, mainly because the institutions were within close proximity of high Hispanic populations (Laird et al., 2007; O'Brien and Zudak, 1998; Laden, 2004). The exceptions are Hostos Community College, Boricua College and the National Hispanic University, which were founded in the late 1960s and early 1970s to address the needs and goals of Hispanics (Laden, 2004). These three institutions were founded with the intention to serve Hispanics students, unlike other

HSI's that became Hispanic serving due to a federal designation and increase in Hispanic enrollment due to shifting demographics. Most HSI's are located in the ten states with the largest population of Hispanic residents. In addition, 35 HSI's are located in Puerto Rico, enrolling over 150,000 students alone.

The importance of HSI's such as Northeastern Illinois University has become vital to the success of Hispanics in the U.S. Hispanics are enrolling in college at higher rates yet they are not attaining their degrees at the same level (Andrade and Shoup, 2005). This deficit calls for action and a better understanding of the factors that do lead to a Hispanic student's success.

HSI's have helped to fill the void by existing within communities and cities of large Hispanic populations. While institutions may be classified as HSI's, a common question remains, how are these institutions such as Northeastern Illinois University "serving" their Hispanic students? What are these institutions doing beyond enrolling a greater proportion of Hispanic students that shows they are "serving" this population? According to a study conducted by Garcia et al in 2004, six HSI's were researched over the span of one year to explore how and if they "serve" Hispanic students and what their challenges and strengths were in assisting with Hispanic student success. These six institutions were also recipients of Title V funds, which are discussed later in this chapter. These institutions agreed on various views including:

Enrolling Latino students is not sufficient to characterize HSI's; Hispanic "serving" institutions must actively promote Latino students' success.

Analysis of institutional elements beyond Hispanic enrollment should be

conducted that better illustrate effective service to Latino students. (Garcia et al., p. 1, 2004)

The study (Garcia et al., 2004) found that all six institutions also agreed that student success needed to be reviewed beyond completion of a four-year degree, but to review other elements of success such as student engagement as measured in NSSE, continuous enrollment, employment after graduation, and even enrollment in graduate school. The leadership of this group also stated that a “serving” institution remains sensitive and responsive to the needs of its students, commits to meeting the educational needs and ensuring academic success and accepts responsibility in its mission for the academic achievement of all students (Garcia et al., 2004). HSI’s such as Northeastern Illinois University must maintain a balance in serving all students, but still remain committed to serving specific groups to help ensure their success.

Student Engagement

As institutions are facing higher levels of scrutiny and accountability, administrators are trying to learn more about how, and if, their institutions contribute to the success levels of their students. The Commission on the Future of Higher Education in 2006, also known as the Spellings Commission, has highlighted the connection and importance of student engagement as an indicator of student performance (U.S. Department of Education, 2006). Therefore, the existing student engagement construct developed by Kuh became useful to higher education professionals to become more accountable through measuring their student engagement levels.

Student engagement is defined in two parts. One, student engagement is the quality of effort and involvement in productive learning activities which the student

pursues (Kuh, 2009). The second is how the institution deploys its resources and organizes the curriculum and other learning opportunities to get students to participate in activities that decades of research studies show are linked to student learning (www.nsse.iub.edu). According to Kuh, "...engagement is a two-way street. Both institutions and students have roles to play in creating the conditions for engagement and for taking advantage of engagement opportunities" (Kuh, pg. 697, 2009b). Engagement can include activities such as reading, writing, preparing for classes, interacting with faculty, collaborating with peers on projects, community service and problem solving (Kuh et al., 2001).

NSSE data helps determine which measures of student learning are valid and reliable indicators of academic success. Data from Hispanic college freshmen and seniors about their educational experiences at a Hispanic-Serving Institution such as Northeastern that participated in the National Survey of Student Engagement (NSSE) were used to highlight an alternative approach to assessing the quality of undergraduate education, specifically in reference to Hispanic college student success. To gain a better understanding of student engagement theory, this study will next explore its origins.

Evolution of Student Engagement Construct

Kuh's student engagement theory is a construct that has evolved from various other theory's including Tyler's Time on Task theory, Pace's Quality of Effort theory, Astin's Student Involvement theory, Tinto's Social and Academic Integration Theory, and Chickering and Gamson's Good Practices in Undergraduate Integration (Kuh, 2009; Bridges et al., 2005). While all the previously mentioned theories have a significant role in the development of students, Kuh's student engagement theory and its survey, the

National Survey on Student Engagement (NSSE), is currently the most utilized construct by administrators to determine university accountability and program enhancements. Before moving into discussion of student engagement of Hispanic students as the focus of this research, it is important to step back and explore the roots of the student engagement theory and how it has laid a strong foundation in student development for all students.

Pace's Quality of Effort

Robert Pace is known for his research on the measurement of quality of effort students have in college and the relationship to student achievement (Pace, 1982). As Pace describes, "Students know that what they get out of college will depend, to a considerable degree, on what they put into it" (Pace, p. 3, 1982). As colleges have become more accountable for many things, colleges are also reviewing how to measure student learning and development. While much of the responsibility remains with institutions of higher education, students are also accountable for the quality of effort they invest during their college years.

Pace's Quality of Effort theory states that time is a frequency and effort is a quality dimension (Pace, 1982). The more time a student spends on quality efforts, the more likely the student will learn. Relevant experiences begin with activities and facilities the college provides that help with student learning and development. Some examples of facilities are university classrooms, libraries, student unions, athletic or recreational buildings, residence halls and cultural spaces. Other events and experiences are also connected with non-facilities, such as connection with faculty members, participation in student organizations, and experiences in research to name a few. All of

these experiences provide a student with an opportunity to invest their time and to have quality connections.

Pace created 14 quality of effort scales, resulting in the creation of the College Student Experience questionnaire in 1978 (Pace, 1982). The questionnaire measures the student's perceptions of the college environment and their estimated gains. Based on the research conducted through the questionnaire, 18 goals were established into four groups that best predicts student achievement: 1) personal and interpersonal understanding, in which a student develops their values; 2) general education objectives, calls for a student to gain a broad understanding of general education; 3) intellectual competencies, requires a student to think analytically and logically; and lastly, 4) understanding science, requires a student to understand science, experimentation and scientific and technological methods and be able to think qualitatively. In summary, the four groups show the importance of quality of effort a student places in their experiences the more likely the student is to succeed (Pace, 1982). Pace concludes, "...granted the importance of all the elements that influence who goes where to college, once the students get there what counts most is not who they are or where they but what they do" (Pace, p. 20, 1982). This statement directly links to Kuh's theory of student engagement showing that students who actively participate in quality activities are more likely to succeed in college.

Chickering and Gamson Good Practices in Undergraduate Integration

In 1987, Chickering and Gamson set out to explore how faculty and students could improve undergraduate education and their research can be clearly seen in the theory of student engagement and its product, the National Survey on Student Engagement (Chickering et al., 1987; Bridges et al., 2005; Kuh, 2009). As they

considered this question, they created seven institutional practices that have been found to provide the foundation to institutional improvement and that serve as guidelines for faculty, students and administrators (Chickering et al., 1987). All seven practices create activity, expectations, cooperation, interaction, diversity and responsibility in education. In addition, Chickering and Gamson found that these principles applied to all types of students, regardless of ethnicity, age, gender, academic preparation and socio-economic background (Chickering et al., 1987)

The first of seven principles relies on student and faculty interaction being frequent and occurring within and outside the classroom (Chickering et al., 1987). A student having the opportunity to get to know a faculty member greatly assists with motivation and encourages intellectual commitment of the student. This can be found through freshman seminars and undergraduate research opportunities. Second, students must have reciprocity and cooperation, such as working with each other and sharing ideas collaboratively. It is important for students to work in teams and experience collaborative and social learning through learning groups, peer tutors and even learning communities. Third, active learning must exist and relate to a student's daily life (Chickering and Gamson, 1987). A student must have the opportunity to discuss their learning, express their learning through writing, and learn how to relate their past experiences into their daily lives. This can be accomplished through structured exercises, team projects, cooperative job programs and peer critiques. Fourth, students must receive prompt feedback with frequent comments so they might reflect on their performance and assess what they know and what they need to know. Appropriate feedback can help a student improve their performance in their coursework and help them understand their

competence level. This could be accomplished through academic counseling, academic portfolio's and detailed feedback from professors and fellow students.

Fifth, students must learn to emphasize time on task, as supported by Tyler's Time on Task Theory (Chickering et al., 1987; Kuh, 2009b). The more time they invest in a task, the greater likelihood that they will succeed in achieving the task. Students need to learn how to utilize their time, allocating realistic amounts of time on projects and overall learning. Students can learn how to manage their time by participating in workshops, learning centers and residential programs. Sixth, it is critical that faculty and administrators communicate high expectations. High expectations should be expected of all students, regardless of academic preparation. If faculty members hold their students to high levels of expectations, students will make the extra effort to reach those expectations. Seventh, institutions must respect the diverse talents and ways of learning each student brings. Not all students learn in the same manner so they cannot be expected to show their learning in one manner. Students must have the opportunity to express their knowledge in different settings and enroll in classes with different forms of pedagogy. Students will improve their learning if they enroll in classes that teach in a form conducive to their learning style, therefore making it possible for the student to remain engaged in class discussions and connect with their instructors.

Alexander Astin's Student Involvement Theory

Astin is one of the most referenced authors on student involvement, linking a student's activities and participation in college directly to student persistence (Astin, 1995). Astin explains his student involvement theory as being simple to understand without complex graphs, connect how the environment influences a student's

development (IEO model), and as a theory that can aid administrators in developing effective practices to assist them in improving student development on their campus (Astin, 1999). Astin defines student involvement theory as

...the amount of physical and psycho-logical energy that the student devotes to the academic experience. Thus, a highly involved student is one who, for example, devotes considerable energy to studying, spends much time on campus, participates actively in student organizations, and interacts frequently with faculty members and other students. (Astin, p. 518, 1999)

He continues to further explain that uninvolved students tend to neglect their studies, do not spend much time on campus, are not involved in extracurricular activities, and do not have constant contact with faculty members (Astin, 1999). Astin describes the student involvement theory to have five hypotheses (Astin, 1999). The first hypothesis refers to the investment of both physical and psychology energy a student places in various objects (Astin, 1999). The second hypothesis states that involvement occurs over a period of time and at different intensity levels as students might invest their energy more or less over periods of time (Astin, 1999). The third hypothesis states that involvement is both quantitative and qualitative as some areas can be measured such as time spent on a project but other things can be viewed qualitatively such as understanding of an assignment (Astin, 1999). The fourth hypothesis cites “the amount of student learning and personal development associated with any educational program is directly proportional to the quality and quantity of student involvement in that program” (Astin, p. 519, 1999). Lastly, Astin’s fifth hypothesis shows the effectiveness of educational

policies can be directly connected to the capacity of that policy to increase student involvement (Astin, 1999).

Related to Astin's theory of student development is his Input-Environment-Outcome (I-E-O) model. Astin first created the I-E-O model as a guide for studying college student development (Astin, 1993). This model helps to make sense of student expectations, which can directly affect their student experiences. The I-E-O model provides educators a foundation for learning how to achieve certain student development outcomes. According to Astin, we must assess the experiences, *Input*, a student brings into college to understand the impact the collegiate experience will have on the student (Kuh, 2009). Inputs refer to characteristics the student has as they enter college, such as grades, culture, socio-economic status, academic aptitude and even parent education (Kuh, 2009, Astin, 1993). These *Inputs*, also referred to by researchers as pre-college factors, can directly influence the type of experiences a student has while in college. New experiences can also be influenced by student expectations and continue to change over time as the student develops (Kuh, 2009). These experiences, *Environment*, refer to the programs, policies, peers, faculty and experiences the students are exposed to while in college (Kuh, 2009; Astin, 1993). The type of environment a student experiences, such as administrative red tape through policies, or positive relationships with faculty, can directly affect a student's academic persistence and college satisfaction. Lastly, *Outcome* refers to the student's characteristics after exposure to various environmental experiences. A student can become a college graduate, educated citizen, challenging supervisor, and even a happy alumnus of the institution based on the *Environment* they experienced while in college (Kuh, 2009). All of the factors shown in the I-E-O model

directly influence a student's college academic performance and beyond, which positively influence Kuh's student engagement theory.

People are neither driven by inner forces nor automatically shaped and controlled by external stimuli. Rather, human functioning is explained in terms of a model of triadic reciprocity in which behavior, cognitive and other personal factors and environment events all operate as interacting determinants of each other. (Bandura, p. 18, 1987)

National Survey on Student Engagement (NSSE)

The National Survey on Student Engagement (NSSE) is the key instrument used to measure student engagement levels of students at universities and colleges throughout the U.S. Various instruments have been available for surveying engagement since the 1970s, however they primarily focused on research rather than to help an institution with accountability and improvements. This often resulted in low response rates due to the length of the surveys (Kuh, 2009). In the early 1990s, the U.S. Department of Education attempted to create a tool to assist institutions with evaluating their student experience, however this project was not completed. In early 1998, Russ Edgerton, of The Pew Charitable Trusts, collaborated with Peter Ewell, of the National Center for Higher Education Management Systems to create a new instrument that could drive institutional change by learning what students gained from their college experience. After input from various scholars and two field tests in 1999 and 2000, the National Survey on Student Engagement (NSSE) became a self-supporting project based on user fees shortly thereafter (Kuh, 2009).

On an annual basis, NSSE collects information at hundreds of four-year colleges and universities about student participation in programs and activities that institutions provide for their learning and personal development (nsse.iub.edu). The data collected provide institutions two things: 1) an estimate of how undergraduates spend their time and 2) what they gain from attending college. NSSE provides participating institutions a variety of reports that compare their students' responses with those of students at self-selected groups of comparison institutions and also provides comparisons for individual survey questions and the five NSSE Benchmarks of Effective Educational Practice.

Survey items on the NSSE represent empirically confirmed "good practices" in undergraduate education (nsse.iub.edu). The items reflect behaviors by students and institutions that are associated with desired outcomes of college and although NSSE doesn't assess student learning directly, the survey results point to areas where colleges and universities are performing well and aspects of the undergraduate experience that could be improved. While accreditation boards and state systems were pressuring institutions for accountability and student learning measurements, NSSE became the key instrument to measure the undergraduate student experience during what Kuh defines as "the perfect accountability storm" (2009). By the later 1990s, accrediting boards placed great pressure for institutions to show they were measuring student outcomes and how these outcomes were being used to improve learning and success (Kuh, 2009b; Del Rios and Leegwater, 2008; Pascarella et al., 2010; Bridges et al., 2005). It became important to know more about students learning, rather than only focusing on characteristics of incoming students and their graduation statistics (Pascarella et al., 2010).

The National Commission on the Future of Higher Education in 2006 created systematic approaches to student learning, which all encouraged or utilized the need for student engagement data (Kuh, 2009). The No Child Left Behind Act established by President Bush, called the federal government to increase their role in holding higher education institutions accountable for student outcomes (Del Rios and Leegwater, 2008). Institutional information needed to become more available to the public so the consumer could utilize quantifiable evidence to measure effectiveness of different colleges. Therefore the value of an assessment tool such as NSSE became more vital, and it became clearer that the level of student satisfaction directly correlated with student persistence, furthering the push for accurate and current student data available through NSSE (Liu, R. and Liu E, 2000; Bridges et al., 2005).

More than 1400 different colleges and universities in the U.S. and Canada have participated in NSSE since it was first administered in 2000, with more than two million participants (www.nsse.iub.edu). The National Survey of Student Engagement obtains on an annual basis, information from hundreds of four-year colleges and universities nationwide about student participation in programs and activities that institutions provide for their learning and personal development (www.nsse.iub.edu).

NSSE Design

The NSSE instrument collects information in five different categories for two different groups of students; freshmen and seniors. The first round of questions includes questions regarding student participation in academically purposeful activities such as interacting with peers or faculty members, how much time they spend studying or working on class projects (Kuh, 2009; Kuh et al., 2001). The second set of questions ask

students about institutional class requirements such as writing papers, reading loads and examinations. The third group of questions deals with college environment perceptions, including how students view the college supports them academically through programs and services. This set of questions also includes the quality of relationships between the students and faculty. The fourth set of questions relate to student demographic information such as gender, race/ethnicity, age, educational status, where they live, and academic major. This background information helps researchers understand how a student's background can affect levels of engagement. It also allows for institutions to link their own data and examine other student outcomes, create benchmarks for institutional improvements and to better understand the impact of major fields, initiatives such as study abroad or internships based on student backgrounds. The last set of questions on the NSSE allows the students to evaluate their level of intellectual and personal growth. Students self report their level of learning in areas such as written and oral communication skills; personal, social and ethical development; and vocational preparation (Kuh, 2009).

Five Benchmarks

NSSE is organized into five benchmarks that help capture critical pieces of the student experience (Kuh and Gonyea, 2009; Kuh et al., 2001). All questions that are asked on the survey are framed around these benchmarks.

1. Level of Academic Challenge
2. Active and Collaborative Learning
3. Student-Faculty Interaction
4. Enriching Educational Experiences

5. Supportive Campus Environment

The first benchmark is *Level of Academic Challenge*, which emphasizes the importance of academic effort, while also setting high expectations for student performance (Kuh, 2009b; Del Rios and Leegwater, 2008). This involves a student preparing for class, the number of assigned textbooks per course, the number of written papers or reports of 20 pages or more, campus environment emphasizing study time, course work emphasizing theories or concepts and even the emphasis of making judgments about the value of information and methods.

The second benchmark is *Active and Collaborative Learning* (Kuh, 2009b). Students learn more when they are asked to reflect about what they are learning and how it applies to different settings. Students also collaborate with others and seek solving difficult problems that they could encounter during their daily lives or after college. This benchmark can be achieved through faculty asking the students questions during class, the students contributing to class discussions, working with other students during projects in and out of the classroom setting, tutoring other students, participating in community based programs such as service-learning, and through discussing ideas from courses with others outside of the class context.

The third benchmark, *Student-Faculty Interaction*, allows the students to learn how experts handle and solve difficult problems by having interaction with faculty. Interaction can include discussions regarding grades or course assignments, discussing career plans with a faculty member or advisor, discussing ideas based on the readings with faculty outside of class, working with faculty on committees and student life activities, and even working with faculty members on research projects.

The fourth benchmark, *Enriching Educational Experiences*, emphasizes the learning that occurs outside of the classroom that supplements that which they learned in the classroom. Such experiences could be exposure to diverse populations, opportunities to study abroad, conversations held with people whose values and beliefs are different than their own, and experiencing world languages. Students also can participate in internships, co-curricular activities such as student organizations, publications, student government and sports. Students can also supplement their learning by taking advantage of learning communities, capstone classes, volunteer work and clinical assignments.

The last benchmark, *Supportive Campus Environment*, might be considered the benchmark that drives the previous four benchmarks forward. A supportive campus environment helps with student satisfaction and fosters the support to help students succeed academically. This environment also helps students cope with non-academic responsibilities such as families and work, provides support to help students thrive socially and improves the relationships with faculty members and administrators. These strong relationships established through support across campus help students make all the other connections needed as identified in the other benchmarks.

Validity of NSSE

While the NSSE is being institutionalized nationwide, there are still concerns regarding its predictive validity. The largest concern was recently expressed through heavy criticism in the *Review of Higher Education* released in the fall of 2011. This section will show both positive and negative validity of the NSSE. Research on the predictive validity of NSSE has yielded mix results.

According to a recent article by Porter (2011), it is argued that the typical college student survey has minimal validity, including the NSSE.

Our surveys lack validity because (a) they assume that college students can easily report information about their behaviors and attitudes, when the standard model of human cognition and survey response clearly suggests they cannot, (b) existing research using college students suggest they have problems correctly answering even simple questions about factual information, and (c) much of the evidence that higher education scholars cite as evidence of validity and reliability actually demonstrates the opposite. (Porter, pgs. 45-46, 2011)

Porter further defines that validity is only established by combining theory and evidence to support the interpretation (Porter, 2011). So how does this overall lack of validity connect more directly with NSSE? He argues that the correlations NSSE describes between benchmarks and student learning might actually obscure as much as they illuminate (p. 50). He further argues that the terms engagement, student outcomes and institutional quality are too vague of terms and they can be found in almost any student survey one conducts. In general, the NSSE may be too broad and does not specify an underlying theory. In regards to student memory, Porter states that students encode memories by events in series such as semesters, courses, then by aspects of the course (2011). Therefore the retrieval process is often seen as a burden for students to remember how many books each course had, how many assignments the students were given, how often they communicated with their faculty member via email, etc. The largest criticism of NSSE according to Porters article is the invalidation of the five benchmarks. Other researchers have attempted to replicate the five benchmark system but to no avail.

The fact that the NSSE's conceptual structure could not be replicated is troubling but not surprising; while the benchmarks were created with a blend of theory and empirical analysis, it seems clear from a review of NSSE documents that the amount of theory is somewhat lacking in favor of empirical analysis. (Porter, p. 64, 2011)

Another criticism focusing on student engagement as a construct argues that one cannot measure engagement as the benchmarks are supposed to be indicators of best practice, without considering the 'bad practices' (Dowd et al., 2011). Dowd et al. state that if engagement is defined by a student's investment on time and effort, then the student effort construct is linked to the economic theory of human capital (2011).

With human capital as the theoretical starting point, the construct of student effort lacked recognition of the effort needed to counter the well-documented negative pressures experienced by members of racial-ethnic groups that are in the minority at Predominately White Institutions (PWI's). (Dowd et al., pg. 18, 2011)

According to the criticism, another problem in the surveys is in treating all college campuses as culturally neutral spaces and ignoring the extra efforts minority students must constantly give in order to succeed, beyond the areas measured in the NSSE such as time spend interacting with faculty, time spent speaking with classmates, etc. (Dowd et al., 2011). In order for the NSSE benchmarks to be more inclusive, Dowd et al. argue the NSSE would need to measure "all aspects of 'student effort' including latent qualities such as effort to counter the effect of marginalizing experiences within the educational environment" (Dowd et al., pg. 22, 2011).

However recent criticism is not the only concern regarding the validity of NSSE. Another major concern derives from the lack of pre-test to learn of the student's individual characteristics (Pascarella et al., 2010; Campbell and Cabrera, 2011).

Although self-reported gains can be formed into psychometrically reliable scales, serious problems exist with the internal validity of any findings in which self-reported gains are taken to be a learning outcome of the educationally effective practices that the NSSE targets. (Pascarella et al., 2010)

Without knowing their pre-college experiences, some of the student's effects to exposure of good practice could have stemmed from their high school years. Pascarella et al. argue that it is difficult to distinguish a student's gain due to these effective practices or due to their "disproportionate openness and receptivity to the college experience" (2010). Due to this uneasiness regarding NSSE's validity, the Center of Inquiry in the Liberal Arts at Wabash College contracted with the Center for Research on Undergraduate Education at the University of Iowa to analyze data from the first year of Wabash's National Study of Liberal Arts Education (Pascarella et al., 2010). The Wabash study is based on longitudinal data based on a pre-test post-test designed to measure the institutional experiences that help enhance growth in educational outcomes.

19 institutions from 11 states comprised of a mix of liberal arts, regional, research and community colleges participated in the study. Data were collected from over 1,400 first-year students when they entered college in the Fall 2006 completing the seven liberal arts outcome measures and again in the Spring 2007 completing NSSE and once again the seven liberal arts outcomes.

The main limitation with the Wabash study was the small sample size of 19 institutions. However, the study concluded that institutional-level NSSE benchmarks scores had a significant positive association with the seven liberal arts outcomes at the end of the first year of college (Pascarella et al., 2010). The findings support the fact that NSSE results associated with educational practices and student experiences are good measures for “growth in important educational outcomes such as critical thinking, moral reasoning, intercultural effectiveness, personal well-being, and a positive orientation toward literacy activities” (Pascarella et al., 2010, pg. 6). This study shows that NSSE does in fact measure exposure to college experiences that predict progress on educational outcomes, independent of the levels of outcomes an institutions study body enters college, therefore validating the NSSE benchmarks.

NSSE and Hispanic Students

Research focusing on Hispanic students and student engagement is limited. However, examples of how institutions have utilized NSSE to improve Hispanic student success can be found in three studies explained further in this section. The first study named the BEAMS Project, is one of the few studies completed that has helped more MSI’s research student engagement on their campuses (Andrade and Shoup, 2005; and Laird et al., 2007). BEAMS was supported by NSSE, the American Association for Higher Education (AAHE) and the Lumina Foundation for Education as a project that emerged from Project DEEP (Documenting Effective Educational Practice), a previous partnership between AAHE and NSSE recognizing best practices in twenty institutions that lead to student success (Del Rios et al., 2008; Bridges et al., 2005). Since many MSI’s had never conducted or used NSSE, BEAMS offered institutional support in forms

of workshops, creation of a consortia, newsletters and forums in order to assist with increased response rates, analysis of data and sustainable efforts over periods of time (Bridges et al., 2005).

Since 2002, 102 four-year MSI's have participated in the BEAMS Project. Of the 102, 55 were HBCU's, 44 HSI's, 3 TCU's and of this total, 40 were private institutions (Del Rios and Leegwater, 2008). All institutions that participated in BEAMS underwent a five step process including: 1) Data collection through NSSE; 2) Data analysis by NSSE staff and data review by campus assessment offices; 3) Collaborative action planning involving campus constituencies; 4) Plan implementation with support from across campus and 5) Short-term assessment to benchmark progress (Del Rios and Leegwater, 2008). Each institution has created various programs, depending on their NSSE results, focusing efforts on retention, first-year programs, thematic learning communities, support service offices and much more.

Unfortunately, not enough research on Hispanics and engagement has been conducted. Many MSI's, including Hispanic-Serving Institutions such as Northeastern, had limited capability to collect and analyze data, and had limited financial resources to make changes. "Often, the institutions with the most obstacles to overcome in making a shift to a data-based culture are those that would benefit the most" (Del Rios and Leegwater, 2008, p. 11). Therefore, the Building Engagement and Attainment for Minority Students (BEAMS) initiative was established in 2002 "to support the important role MSI's play in facilitating minority students' participation in and completion of higher education" (Del Rios et al., 2008, p. 3). The available research showing student engagement at HSI's is limited and almost non-existent. One of the most common issues

raised in the BEAMS project is the lack of financial resources available at MSI's to establish internal data collection, technology structures to help sustain data collection and limited resources to participate in national surveys such as NSSE. One of the final concerns was the lack of participation by peer groups to help in the creation of reliable comparison data. Since many MSI's lack financial resources to participate in national assessment survey's, those that do participate find limited comparable peer sets to judge their own results. The BEAMS Project helped institutions develop a culture of data-based change and created the foundation for sustainable initiatives that will lead to improvements in student success (Del Rios and Leegwater, 2008; Bridges et al, 2005). Many of the BEAMS institutions began focusing their changes on first-year experience programs, academic advising, and service learning. One university instituted co-curricular programs as a way to increase student engagement. While each institution is utilizing its' data to improve its practices, the BEAMS Project has been effective in assisting MSI's progress with utilizing NSSE data to assist with student engagement, hopefully adding to the future research available for HSI's such as Northeastern.

The second research article discussing Hispanics and engagement, by Andrade and Shoup in 2005, studied Hispanic student persistence, academic success and graduation. Data from the NSSE were utilized as a common indicator in the above study (Garcia, 2004) but also in a follow-up study conducted by eight HSI's known as the Latino Student Success (LSS) project (Andrade and Shoup, 2005). The LSS allowed for the eight HSI's to use comparable data from the 2003 NSSE to explore whether Latino seniors had different perceptions and experiences than those attending other HSI's and non-HSI's (Andrade and Shoup, 2005). As a follow-up study for the Latino Student

Success demonstration project, this study examined Hispanic senior NSSE respondent differences across scales derived from NSSE. “The focus was on seniors as ‘survivors,’ i.e., students who had demonstrated academic success and were likely to attain a bachelor's degree”(Andrade and Shoup, p. 6, 2005). Two types of student-level scales were used for this purpose: the five NSSE benchmarks of effective educational practice and five auxiliary scales. The component items from one additional scale were examined separately. The data were collected from seniors attending HSI's in California, Texas and New York by random sampling. Data were collected from eleven HSI's and twenty non-HSI's (Andrade and Shoup, 2005). The results found that there were significantly lower levels of Enriching Educational Experience by Hispanic seniors attending HSI's (LSS institutions and overall) than those attending non-HSI's (Andrade and Shoup, 2005). However, the research found significantly higher levels of Supportive Campus Environment was found for Hispanic students attending HSI'S versus those attending non-HSI's (Andrade and Shoup, 2005). While the results showed mixed results on the effect of attending a HSI versus a non-HSI, the data from the LSS project still showed Hispanics attending HSI's reported significantly higher levels of quality relationships with other students (Andrade and Shoup, 2005).

Another research article regarding Hispanics and engagement, by Laird et al. (2007), used data from the 2003 NSSE to explore the differences in the educational experiences of Hispanic students at HSI's and PWI's while providing a contrasting picture of the experiences of African American students attending HBCU's and PWI's. This research study reviewed the students' levels of engagement in effective educational practices, their satisfaction with college, and their perception of how much they have

gained from college in terms of personal and intellectual development differ for Hispanics and African Americans across institutional contexts (Laird et al., 2007). Researchers used two separate samples in this study consisting of African American seniors at PWI's and HBCU's and Hispanic seniors attending PWI's and HSI's that responded to NSSE in 2003 (Laird et al, 2007). The samples consist of 2896 African American seniors from 334 PWI's, 1852 African American seniors from 20 HBCU's, 2149 Hispanic seniors from 321 PWI's, and 2028 Hispanic seniors from 26 HSI's.

In relation to Hispanic students and engagement, the results of the study found the average Hispanic senior at an HSI looks similar to the average Hispanic senior attending a PWI in terms of engagement, satisfaction with college, and gains in overall development (Laird et al., 2007). The largest differences between the both groups of Hispanic students were on active and collaborative learning, student-faculty interaction, and gains in overall development. Research findings also revealed that Hispanic and African American seniors at PWI's have nearly identical scores on each of the six scales. For Active and Collaborative Learning as well as gains in overall development, the Hispanic seniors at HSI's score modestly higher than the Hispanic seniors at PWI's after controlling for student and institutional characteristics. In summary, the authors state:

...this was largely an exploratory study aimed at determining whether differences in engagement, student satisfaction, and students' perceptions of their gains from college between seniors at HSI's and PWI's mirrored those found for African American students. That the patterns did not match was not entirely a surprise given the different histories and make up of HBCU's and HSI's. Rather than suggesting that this is an indication that HSI's do not serve Hispanic students to

the same degree that HBCU's serve African Americans, the results of this study point us toward asking more refined and deeper questions which will help expand our understanding of HSI's and how they, in fact, do serve the educational needs of Hispanic students...additionally, work is needed to further expand our understanding of the experience of Hispanic students on HSI campuses. (Laird et al., p. 23, 2007)

The three cited research articles provide the majority of research specifically focusing on Hispanic students and engagement yet still show how limited the scope of research is for Hispanics and engagement. As noted by Laird et al. (2007), it is important to continue to expand this research and further understand Hispanic student engagement overall, and moreover the engagement levels of Hispanics attending a HSI. More research has to be conducted about Hispanics and/or HSI's in order to gain a better understanding of the challenges and opportunities addressing Hispanics in higher education. This is another reason this research is important and will help add to the literature available for practioners looking to improve their services or researchers hoping to better understand their subjects. Therefore, I will further explore the demographic profile of Hispanic students at Northeastern and delve deeper to understand their experiences through student engagement.

Chapter 3

METHODOLOGY AND PROCEDURES

The purpose of this chapter is to provide an overview of the research questions driving this study. This chapter will provide a description of the survey instrument (NSSE), information about the sample, a description of the methods and statistical analysis, discuss the validity of NSSE and the limitations of this study. This research questions are:

1. In 2010, what were the descriptive characteristics of undergraduate Hispanic students attending NEIU who completed the NSSE?
2. Is there a statistical difference in engagement between all freshmen and all seniors?
3. Is there a statistical difference in engagement between Hispanic freshmen and White freshmen?
4. Is there a statistical difference in engagement between Hispanic seniors and White seniors?
5. For all freshmen who completed the 2010 NSSE survey, controlling for relevant demographic variables, what is the relationship between the five NSSE benchmarks and their cumulative NEIU grade point average?
6. For all seniors who completed the 2010 NSSE survey, controlling for relevant demographic variables, what is the relationship between the five NSSE benchmarks and their cumulative NEIU grade point average?

7. For Hispanic freshmen who completed the 2010 NSSE survey, controlling for relevant demographic variables, what is the relationship between the five NSSE benchmarks and their cumulative NEIU grade point average?
8. For Hispanic seniors who completed the 2010 NSSE survey, controlling for relevant demographic variables, what is the relationship between the five NSSE benchmarks and their cumulative NEIU grade point average?
9. For White freshmen who completed the 2010 NSSE survey, controlling for relevant demographic variables, what is the relationship between the five NSSE benchmarks and their cumulative NEIU grade point average?
10. For White seniors who completed the 2010 NSSE survey, controlling for relevant demographic variables, what is the relationship between the five NSSE benchmarks and their cumulative NEIU grade point average?
11. For freshmen who completed the 2010 NSSE survey, controlling for relevant demographic variables, what is the relationship between the five NSSE benchmarks and student retention the following year (Fall 2010)?
12. For Hispanic freshmen who completed the 2010 NSSE survey, controlling for relevant demographic variables, what is the relationship between the five NSSE benchmarks and student retention the following year (Fall 2010)?
13. For White freshmen who completed the 2010 NSSE survey, controlling for relevant demographic variables, what is the relationship between the five NSSE benchmarks and student retention the following year (Fall 2010)?

Survey Instrument

The National Survey on Student Engagement was used for this study. It is an instrument maintained through the Center for Postsecondary Research at Indiana University, School of Education. The NSSE instrument measured the degree to which students participated in certain educational practices are linked to valued outcomes of college (Chickering & Gamson, 1987; Kuh, 2001, 2003). More than 1400 different colleges and universities in the U.S. and Canada and over two million students have participated in NSSE since it was first administered in 2000 (www.nsse.iub.edu). The NSSE has been administered yearly at Northeastern Illinois University to measure student participation in programs and activities that Northeastern believes enhance their learning and personal development. The data collected assists the Northeastern Illinois University Retention Team by estimating how undergraduate students spend their time and what they gain from attending college. Survey items on the NSSE represent empirically confirmed "good practices" in undergraduate education. That is, they reflect behaviors by students and institutions that are associated with desired outcomes in college.

NSSE has created five benchmarks, described in Chapter 2, to measure effective educational practice (Chen et al., 2009; Kuh, 2009). Specifically, NSSE assesses student experiences in the following benchmarks which will serve as an independent variable in this study: (1) Active and Collaborative Learning measures student involvement in a variety of educationally purposeful in-class and out-of-class activities; (2) Level of Academic Challenge measures the amount of time students spend on writing and reading; (3) Enriching Educational Experiences measures student participation in educational

programs, including study abroad, internships senior capstone courses as well as learning communities; (4) Supportive Campus Environment measures student perceptions of the campus environment including the quality of students' relationships with peers, faculty members, and administrators, and (5) Student-Faculty Interaction measures student satisfaction with academic advisors and the overall collegiate experience. In addition to the five benchmarks, students estimate their educational, personal, and social growth and development in selected areas since starting college (pre-college factors) and provide demographic information, such as gender, age, race/ethnicity, enrollment status, living arrangements, and major field. The survey also includes three self-reported gains scales from 16 questions measuring the extent to which the student experience at the institution contributed to their learning and growth.

Northeastern Illinois University

Descriptive statistics were conducted on Hispanic students enrolled at Northeastern in Spring 2010. For the purpose of this study, enrollment data will be reviewed from Northeastern during Fall 2009 and retention data from Fall 2010, since grades and retention data were not available during Spring 2010.

Northeastern is a co-ed, public, commuter, urban university offering both bachelor and master degrees in over 40 disciplines. Northeastern offers less competitive admission, accepting 65.5% of total applicants (U.S. News and World Report, 2010; Kelly et al., 2010). The total undergraduate enrollment at Northeastern in Fall 2009 was 9,191, of which 3,841 students were enrolled part-time and 5,350 were enrolled full-time. Northeastern has a total Hispanic undergraduate enrollment of 2,781 (30.3% of total undergraduates) (www.neiu.edu/~isp/data). 13% of undergraduates took out federal

student loans, with 34% of undergraduate full-time students receiving federal aid and 25% of part-time students receiving aid.

Sample

In Spring of 2010, over 2,700 students (1023, freshmen; 1719, seniors) completed the National Survey of Student Engagement at Northeastern Illinois University. The response rate was 39% (385 freshmen; 697 seniors). Northeastern submitted names and email addresses to NSSE of all freshmen, students with fewer than 30 credit hours earned, and all seniors, students with more than 90 credit hours earned. NSSE randomly selected a subset of freshmen and seniors and sent the survey to those randomly selected. Only electronic surveys were administered. Students were allotted two months to complete the survey, with constant email reminders being sent out and incentives provided to encourage a high response rate (N=391, freshmen; N=699, seniors). Of the total respondents, 319 Hispanic students completed the survey (29% of the total respondents). This sample is reflective of the larger Hispanic population attending Northeastern as Hispanics make up approximately 30% of undergraduates attending the institution.

The breakdown of gender, age, class, enrollment status, and ethnicity can be found in Table 2. Sampling error for Northeastern's NSSE survey was an average of 2.3%. According to Chen et al. (2009), sampling error percentages are preferably between 3-5 percent.

Table 2

Ethnicity Breakdown NSSE Participants, Spring 2010 Northeastern Illinois University

Class Level	Race	Frequency	Percent
Freshmen (1 st Year)	Am Indian	2	.5
	Asian	39	10.0
	Black	23	5.9
	Hispanic	157	40.2
	Non Res Alien	28	7.2
	Unknown	22	5.6
	White	120	30.7
	Total	391	100.0
Senior (4 th Year)	Am Indian	2	.3
	Asian	60	8.6
	Black	67	9.6
	Hispanic	162	23.3
	Non Res Alien	35	5.0
	Unknown	53	7.6
	White	320	45.8
	Total	699	100.0

Data provided by Office of Institutional Research, NEIU

Variables

The NSSE included 42 items that comprised the five Benchmarks of Effective Educational Practice. The items relate to student engagement and institutional activities. Responses were scored using various scales including a four-point scale measuring the progress or gains for each student, ranging from very often to never. Benchmarks results range from zero to 100 with the higher scores reflecting higher levels of engagement. The Five Benchmarks of Effective Educational Practice, listed below, serve as the

independent variables and are listed below, with the items fitting into the benchmark categories.

Dependent Variables

1. Cumulative Grade Point Average (GPA)
2. Retention of Freshman (for Fall 2010)

Independent Variables

1. Grade Point Average
2. Gender
3. Age
4. Ethnicity
5. Class (freshmen/senior)
6. ACT (freshmen only)
7. Student Engagement (5 Benchmarks provided below)

Level of Academic Challenge (11 items)

1. Time spent preparing for class (studying, reading, writing, rehearsing, etc. related to academic program)
2. Working harder than you thought you could to meet an instructor's standards or expectations
3. Number of assigned textbooks, books, or book-length packs of course readings
4. Number of written papers or reports of 20 pages or more.
5. Number of written papers or reports of between 5 and 19 pages
6. Number of written papers or reports of fewer than 5 pages
7. Coursework emphasizing analysis of the basic elements of an idea, experience or theory
8. Coursework emphasizing synthesis and organizing of ideas, information, or experiences
9. Coursework emphasizing the making of judgments about the value of information, arguments, or methods
10. Coursework emphasizing application of theories or concepts to practical problems or in new situations
11. Campus environment emphasizing time studying and on academic work

Student-Faculty Interaction (5 items)

1. Discussed grades or assignments with an instructor
2. Talked about career plans with a faculty member or advisor
3. Discussed ideas from your readings or classes with faculty members outside of class
4. Worked with faculty members on activities other than coursework (committees, orientation, student-life activities, etc.)
5. Received prompt written or oral feedback from faculty on your academic performance
Worked with a faculty member on a research project

Active and Collaborative Learning (7 items)

1. Asked questions in class or contributed to class discussions
2. Made a class presentation
3. Worked with other students on projects during class
4. Worked with classmates outside of class to prepare class assignments
5. Tutored or taught other students
6. Participated in a community-based project as part of a regular course
7. Discussed ideas from your readings or classes with others outside of class (students, family members, co-workers, etc.)

Enriching Educational Experiences (5 items)

1. Talking with students with different religious beliefs, political opinions, or values
2. Talking with students of a different race or ethnicity
3. An institutional climate that encourages contact among students from different economic, social and racial or ethnic backgrounds
4. Using electronic technology to discuss or complete an assignment
5. Participating in:
 - a. Internships or field experiences
 - b. Community service or volunteer work
 - c. Foreign language coursework
 - d. Study abroad
 - e. Independent study or self-assigned major
 - f. Culminating senior experience
 - g. Co-curricular activities
 - h. Learning communities

Supportive Campus Environment (6 items)

1. Campus environment provides the support you need to help you succeed academically
2. Campus environment helps you cope with your non-academic responsibilities (work, family, etc.)

3. Campus environment provides the support you need to thrive socially
4. Quality of relationships with other students
5. Quality of relationships with faculty members
6. Quality of relationships with administrative personnel and offices

Methods and Statistics

Human subject approval was first requested by the University of Kansas Human Subjects Committee in January of 2012, in order to obtain student information for the purpose of this study. Research question one is a descriptive analysis of the mean, standard deviation, and number of the sample who responded to the NSSE. Student data were collected through the NSSE. This data were later linked to institutional data. NEIU collects information on students from the time they are identified as prospective students to the time they graduate. NEIU collects data on student demographics, pre-college information for admission purposes, academic performance, financial need and enrollment status.

The population of this study is defined as those students who completed the NSSE in the Spring of 2010. Since the NSSE was conducted during the Spring 2010 semester, institutional data provided were from the end of the Fall 2009 semester. Institutional data were then included from Northeastern Illinois University to provide more information on students including the following variables: age, gender, full-time or part-time enrollment status, admission type at entry to Northeastern, if they had entered as freshmen or transfer students. See Table 4 for variables. Student identification numbers were stricken from the data before being provided to the researcher as to limit any confidentiality concerns.

Several statistical analyses were conducted. Cronbach's Alpha was run to test the reliability of the scales for all five benchmarks (see Table 3). Cronbach's Alpha is measured on a scale of zero to one, with a stronger alpha being closer to one. Three

separate alpha tests were conducted, one for all students who completed the NSSE, another for freshmen and a third for seniors to see if there were similar patterns between both alpha tests.

The results of the Chronbach's Alpha tests show that the range of the alpha scores was acceptable. The closer the score is to 1.0, the stronger the alpha. Overall, alpha scores were closely associated with all three groups. While the range of the alpha scores were acceptable, they were strongest for the freshman class. The lowest alpha score was found in Enriching Educational Experiences for all students, freshmen and seniors. The highest alpha score was consistently found in Supportive Campus Environment for all students, freshmen and seniors. For the list of items tested in each benchmark, see Appendix A for *Benchmarks of Effective Educational Practice*.

Table 3

NSSE Alpha scores by all students, Freshmen and Seniors

	NSSE Benchmark	Cronbach's Alpha	N of Items
All Students	Level of Academic Challenge	.718	11
	Student Faculty Interaction	0.734	6
	Active and Collaborative Learning	0.7	7
	Enriching Educational Experiences	0.676	12
	Supportive Campus Environment	0.782	6
Freshmen	Level of Academic Challenge	0.72	11
	Student Faculty Interaction	0.762	6
	Active and Collaborative Learning	0.732	7
	Enriching Educational Experiences	0.72	12
	Supportive Campus Environment	0.792	6
Seniors	Level of Academic Challenge	7.2	11
	Student Faculty Interaction	0.716	6
	Active and Collaborative Learning	0.676	7
	Enriching Educational Experiences	0.653	12
	Supportive Campus Environment	0.774	6

Alpha Scores by NSSE Benchmark by class

Once the data were obtained, the researcher conducted a combination of descriptive statistics for six groups who completed the NSSE: 1) All freshmen; 2) Hispanic freshmen; 3) all seniors; 4) Hispanic seniors; 5) White freshmen and 6) White seniors. Output data encompassed frequency data including mean, median, mode and standard deviation. This analysis also contains frequencies on full-time and part-time status, gender by freshmen and senior class, and admission types for freshmen and seniors.

Table 4

Research Question Variables			
Variable	Variable Type	Collected	Analysis
Age	Continuous	Self reported on Admission Application	Frequency Distribution, Measures of Central Tendency
Gender	Discrete	Self reported, optional on Admission Application	Frequency Distribution
Enrollment Status (part-time vs. full-time), credit hours	Discrete	Collected after 20 th day enrollment count through Banner, Student information system 11 or less= part-time, 12 or more=full-time	Frequency Distribution Measures of Central Tendency
Admission Categories	Discrete	Admission application	Frequency Distribution
Transfer/Freshmen (applicant type)	Discrete	Admission application	Frequency Distribution

Next, t-tests were conducted to learn if there was a difference in engagement levels between various groups. The t-tests compared the means of the five benchmarks

for various groups to learn if there was any significant difference ($p > .05$). Comparison groups were all freshmen vs. seniors, White freshmen vs. Hispanic freshmen and White seniors vs. Hispanic seniors.

For research questions predicting grade point average, six separate Multiple Regression Analysis (MRA) were conducted for both freshmen, seniors, sub-groups Hispanic and White students. Before running the regressions, dummy codes were created for ethnicity as: White versus Asian: 1= Asian, 0= non-Asian; White versus Black, 1= Black, 0= non-Black; White versus Hispanic, 1= Hispanic, 0= non-Hispanic; and White versus Other, 1= Other, 0= non-Other. After creating the dummy codes, regressions were conducted for all NSSE respondents, including both freshmen and seniors, while using GPA as the dependent variable and the five NSSE benchmarks as independent variables. Age, gender, ethnicity, and class for both freshmen and seniors will be added as predictors. Next, regressions were run for Hispanic students and the group was split by freshmen and seniors. The same variables and predictors were used. Lastly, the final sets of regressions were run for select case variable White students and the population was split by freshmen and seniors.

The Northeastern Illinois University cumulative GPA was compiled through the Office of Institutional Research at Northeastern using the Banner student information system. Cumulative GPA was defined as the Fall 2009 cumulative GPA from Northeastern. The purpose of using this method was to learn if there was a significant relationship between the five benchmarks and student GPA. The multiple regression analysis will help to establish a formula where engagement types better predict student success as shown through GPA. The analysis provided an index of how good the

prediction was in terms of the proportion of variation in college GPA and the five benchmarks.

Next, logistic regressions were conducted and analyzed to see if engagement predicted retention in freshman respondents after controlling for age, GPA, gender, ethnicity and ACT results. Logistic regression were used for research question eleven through thirteen since the benchmarks were continuous and retention is dichotomous, meaning either they were or were not retained from Fall 2009 to Fall 2010. Engagement levels based on the benchmark scores served as the independent variable and student retention served as the dependent variable.

Since Northeastern's seniors are classified as students with 90-120 credits, a logistic regression analysis was not run to predict retention for the senior population. To further elaborate, engagement was not a valuable predictor of retention or graduation for the seniors since they were more likely to be part-time students, transfers into NEIU, stopping out or tend to take much longer than one year to graduate regardless of credit hours completed. Therefore freshmen served as the focus of the logistic regressions in order to learn if the levels of engagement, as measured through the five NSSE benchmarks, predicted their retention from the Fall 2009 term to Fall 2010. Various logistic regressions including all freshmen, White freshmen, and Hispanic freshmen were conducted to learn if engagement was a predictor of retention. Control variables were gender, GPA and ACT scores. Age served as a covariate.

Validity of NSSE

Studies have supported the validity of NSSE as a reliable instrument for assessing the connection between student engagement and academic success. Closely resembling

Pascarella et al.'s research from 2010, *Connecting the Dots*, a report prepared for the Lumina Foundation for Education (Pascarella et al., 2010; Kuh et al., 2006b), found positive links to research connecting student engagement in educationally purposeful activities, first year GPA, first year persistence and senior year GPA (nsse.iub.edu). The report analyzed the relationship between NSSE results, pre-college experiences, college grades, and persistence into the second year. About 11,000 first-year and senior students from 18 four-year institutions, including four HBCU's and three HSI's were selected. Student data from NSSE responses, academic transcripts, financial aid information, and ACT/SAT scores were reviewed to explore the effects of engagement on grades and persistence. The results showed, after taking into account pre-college and college influences, student engagement had a small but statistically significant effect on first year grades (www.nsse.iub.edu). A one-standard deviation increase in engagement resulted in a GPA increase of .04 points. In regards to first year persistence, student engagement also had a positive and statistically significant effect. Students who are engaged at a level that is one standard deviation below the average have a .85 probability of returning. Students who are engaged at a level that is one standard deviation above the average have a .91 probability of returning, .06 more than those one standard deviation below. Lastly, after measuring the amount of hours spent studying and the global student engagement scale, the results showed a small but positive impact on senior year grades. After controlling for prior year academic grades, students who studied 21 or more hours per week had a GPA .04 higher than peers who studies five or fewer hours per week. As a result, for every one standard deviation increase in a student's engagement, their senior year GPA increased by .03 points. It is clear that the more students engage in educationally purposeful

activities as determined through the NSSE, the higher levels of academic success they will have.

Limitations

One limitation of this study is the sample size collected by Northeastern Illinois University. A larger sample of students would help provide a more reliable analysis of the data. A second limitation of the study is that it is not longitudinal but rather based solely on data from the 2010 NSSE. If more respondents had participated in the previous years that the NSSE was administered at Northeastern Illinois University, it would have been helpful to study Hispanic students over the span of multiple years. A more robust review of Hispanics at NEIU could provide more insight of the student's engagement levels.

A third limitation of this study is that it only investigates Hispanic students, with a comparison group (White students). If other populations, such as African Americans, since they too face challenges with retention and graduation at Northeastern, the results may have confirmed how the various populations were different or similar in terms of engagement. However, because the focus and nature of Northeastern Illinois University is serving as a Hispanic Serving Institution, it is important to learn more about the population it is increasingly serving. In addition, according to the Review of Higher Education, the NSSE does not adequately represent the experiences of minority groups (Dowd et al., 2011). Campus climates are not all equal and NSSE falls short in describing minority student's experiences with engagement.

Chapter 4

ANALYSIS OF DATA

This chapter provides statistical data from output on NEIU's 2010 NSSE results. The statistics focus primarily on Hispanic students, while also comparing the overall respondents and White students to explore any significant differences. NSSE data were incorporated with NEIU institutional data, including student GPA, retention, enrollment status, and admission type. Freshmen were classified as students with 0-30 credit hours and seniors were those with 90-120 credits.

Descriptive statistics on population and sub-groups

Research Question #1: In 2010, what were the descriptive characteristics of undergraduate Hispanic students attending NEIU who completed the NSSE?

The Hispanic population who completed the NSSE in 2010 had an average age of 25.7 ($SD=8.20$). Of the Hispanic freshmen population, we eliminated nine students who entered NEIU prior to 2009 (bringing the total respondents from 1090 to 1081) (see Table 5). Of the 1081, 715 (66.1%) were female and 366 (33.9%) were males. Hispanics students comprised 317 (29.3%) compared to 436 (40.3%) White students. Students enrolled at NEIU full-time equaled 762 (70.5%), versus 319 (29.5%) part-time students. See Table 5 for a breakdown in frequencies and percentages.

The sample who completed the NSSE closely resembled the NEIU undergraduate population. The average age of all undergraduate Northeastern students in 2009 was 26, compared to 25.7 of NSSE respondents. Also, Hispanic students represented 30.3% (versus 29.3% from NSSE) and Whites represented 39% (versus 40.3%). Part-time students (41.8% vs. 29.5%) and males (42% vs. 33.9%) were underrepresented in the

NSSE sample and as a result, full-time students (58.2% vs. 70.5%) and females (58% vs. 33.9%) were overrepresented in the NSSE results. In addition, the retention rate of NSSE respondents for freshmen (from Fall 2009 to Fall 2010) was higher (77%) than NEIU's freshmen retention rate of 68.2%.

Table 5

Summary of Frequencies and Percentages for Gender, Ethnicity and Enrollment Status

Student Type	Frequency	Percentage %
Freshmen	382	35.3%
Seniors	699	64.7%
Gender	Frequency	Percentage %
Male	366	33.9%
Female	715	66.1%
Ethnicity	Frequency	Percentage %
White (non-Hispanic)	436	40.3%
* Other	139	12.9%
Hispanic	317	29.3%
Black	90	8.3%
Asian American	99	9.2%
Enrollment Status	Frequency	Percentage %
Full-time	762	70.5%
Part-time	319	29.5%

* Other is classified as American Indian, Non-resident Alien and Unknown

Now that I have provided descriptive statistics on the entire population, I will provide information on the subgroups that were compared throughout this research; freshmen, seniors, Hispanic freshmen, White freshmen, Hispanic seniors and White seniors (see Tables 6-8). Freshmen were classified as students with 0-30 credit hours at the time the NSSE was administered in Spring 2010. A total of 382 freshmen completed the NSSE survey and had an average age of 19.8 ($SD=3.9$). Of those freshmen, 241 (63.1%) were female, and 141 (36.9%) were male (see Table 6). There were 155 Hispanic freshmen, 116 White freshmen of the total 382 students. Those enrolled as full-time students equaled 345 (90.3%), versus 37 (9.7%) part-timers. Of the 382 total freshmen, 342 (89.5%) began at NEIU as freshmen, versus 40 (10.5%) who were transfers.

Table 6

Summary of Freshmen/Senior Frequencies and Percentages for Gender, Ethnicity and Enrollment Status

Gender	Frequency (freshmen)	Percentage % (freshmen)	Frequency (seniors)	Percentage % (seniors)
Male	141	36.9%	225	32.2%
Female	241	63.1%	474	67.8%
Ethnicity	Frequency	Percentage %	Frequency	Percentage %
White (non-Hispanic)	116	30.4%	320	45.8%
*Other	49	12.8%	90	12.9%
Hispanic	155	40.6%	162	23.2%
Black	23	6.0%	67	9.6%
Asian American	39	10.2%	60	8.6%
Enrollment Status	Frequency	Percentage %	Frequency	Percentage %
Full-time	345	90.3%	417	59.7%
Part-time	37	9.7%	282	40.3%

*Other is classified as American Indian, Non-resident Alien and Unknown

Table 7

Summary of Hispanic Freshmen/Seniors Frequencies and Percentages for Gender and Enrollment Status

Gender	Frequency (freshmen)	Percentage % (freshmen)	Frequency (seniors)	Percentage % (seniors)
Male	47	30.3%	42	25.9%
Female	108	69.7%	120	74.1%
Enrollment Status	Frequency	Percentage %	Frequency	Percentage %
Full-time	345	90.3%	97	59.9%
Part-time	37	9.7%	65	40.1%

Table 8

Summary of White Freshmen/Seniors Frequencies and Percentages for Gender and Enrollment Status

Gender	Frequency (freshmen)	Percentage % (freshmen)	Frequency (seniors)	Percentage % (seniors)
Male	50	43.1%	112	35%
Female	66	56.9%	208	65%
Enrollment Status	Frequency	Percentage %	Frequency	Percentage %
Full-time	104	89.7%	186	58.1%
Part-time	12	10.3%	134	41.9%

Seniors were classified as students with 90-120 credit hours at the time the NSSE was administered. A total of 699 seniors completed the NSSE survey and had an average age of 28.9 ($SD=8.16$). Of the total 699 seniors, 474 (67.8%) were female, compared to 225 (32.2%) males. There were 162 Hispanic seniors and 320 White seniors of the total senior population. A total of 417 (59.7%) seniors were enrolled full-time versus 282 (40.3%) part-time. Of the 699 seniors, only 117 (16.7%) began at NEIU as freshmen, versus the 582 (83.3%) who transferred to NEIU.

Next descriptive data will be provided for both Hispanic and White freshmen (see Tables 6-8). Out of the 155 Hispanic freshmen, the mean age was 19.5 ($SD=3.6$), compared to 19.8 ($SD=4.2$) of the 116 White freshmen. There were 108 (69.7%) Hispanic females, 47 (30.3%) Hispanic males compared to 66 (56.9%) White females and 50 (43.1%) White males. Of Hispanic freshmen, 143 (92.3%) were enrolled full-time, 12 (7.7%) enrolled part-time compared to 104 (89.7%) full-time White freshmen and 12 (10.3%) part-time White freshmen. Of the 155 Hispanic freshmen, 148 (95.5%) were admitted to NEIU as freshmen and 7 (4.5%) were admitted as transfer students, while 102 (87.9%) of the 116 White freshmen were admitted as freshmen with 14 (12.1%) transfers.

Finally, descriptive data is provided for both Hispanic and White seniors (see Tables 7 and 8). The mean age for Hispanic seniors was 28.2 ($SD=7.2$) compared to 29 ($SD=8.43$) for White seniors. There were 120 (74.1%) Hispanic females, 42 (25.9%) Hispanic males, compared to 208 (65%) White females and 112 (35%) White males. Of the 162 Hispanic seniors, 97 (59.9%) enrolled full-time, compared to 65 (40.1%) who enrolled part-time. Of the 320 White seniors, 186 (58.1%) were enrolled as full-time students and 134 (41.9%) were part-time. A total of 38 (23.5%) of the 162 Hispanic seniors were admitted to NEIU as freshmen applicants, versus 124 (76.5%) who transferred to NEIU. Only 45 (14.1%) of White seniors were admitted as freshmen, compared to 275 (85.9%) who entered as transfer students.

NSSE Items

This section provides descriptive statistics on the individual NSSE items. The following sections will further review the NSSE benchmarks as a whole. Individual items will be explored for freshmen, seniors and Hispanic students. All benchmarks are on a

4.0 scale, but Supportive Campus Environment is on mixed scale of 4.0 and 5.0 (see Tables 13 and 18). For the purpose of this study, the data were divided into freshmen and seniors, and then a benchmark table was created with the individual items. In each table, data were provided for sub-groups including all students, White and Hispanic students. For the purposes of this section, high means are those over 3.0 with low means being lower than 1.0 (on a 4 point scale). No further statistical reports were run on this data to determine statistical significance (regressions in the following section will determine if the benchmarks predict student success).

Level of Academic Challenge was the benchmark with the highest means for freshmen. Many of the means were over 3.0 on a 4.0 scale, with the highest item being *Analyzing the basic elements of an idea, experience or theory* ranging between 3.21 for all freshmen, 3.30 for White freshmen and 3.21 for Hispanic freshmen (see Table 9).

Table 9

NSSE Items Means for Freshmen, Level of Academic Challenge

Item	All, Mean (N=318)	White, Mean (N=98)	Hispanic, Mean (N=130)
Worked harder than you thought you could to meet an instructors standards or expectations	2.88 (.825)	2.78 (.893)	2.99 (.809)
Analyzing the basic elements of an idea, experience or theory	3.21 (.757)	3.30 (.667)	3.21 (.773)
Synthesizing and organizing ideas, information or experiences	3.10 (.790)	3.13 (.731)	3.09 (.788)
Making judgments about the value of information, arguments or methods	3.04 (.845)	3.16 (.803)	3.06 (.843)
Applying theories or concepts	3.14 (.848)	3.15 (.848)	3.16 (.864)
Spending significant amounts of time studying and on academic work	3.15 (.767)	2.98 (.804)	3.26 (.772)

Note: N used is the Valid N for the benchmark by subgroup. Items are on a four-point scale. Parentheses denote Standard Deviation.

There were several items categorized as low in Active and Collaborative Learning for freshmen. Both items *Tutored or taught other students* and *Participated in a community-based project* were in the mid 1.0 range (see Table 10). The lowest subgroup was White freshmen, tutored or taught, 1.46; participated in community-based, 1.36). None of the items in this benchmark were high. In Table 10, *Worked with faculty members on activities other than coursework* was the lowest item, with all freshmen mean of 1.71, White freshmen mean 1.50 and the Hispanic freshmen mean of 1.82 (see Table 10). The other items ranged within 2.0-3.0.

Table 10

NSSE Items Means for Freshmen, Active and Collaborative Learning Benchmark

Item	All, Mean (N= 346)	White, Mean (N=106)	Hispanic, Mean (N=138)
Asked questions in class	2.91 (.837)	2.99 (.843)	2.91 (.830)
Made a class presentation	2.34 (.846)	2.22 (.896)	2.36 (.798)
Worked with other students on projects during class	2.74 (.813)	2.69 (.810)	2.70 (.836)
Worked with classmates outside of class	2.23 (.925)	2.01 (.880)	2.33 (.946)
Tutored or taught other students	1.57 (.832)	1.46 (.818)	1.54 (.805)
Participated in a community-based project	1.50 (.789)	1.36 (.724)	1.55 (.797)
Discussed ideas from readings with others outside class	2.88 (.903)	2.75 (.902)	2.97 (.942)

Note: N used is the Valid N for the benchmark by subgroup. Items are on a four-point scale. Parentheses denote Standard Deviation.

Table 11

NSSE Items Means for Freshmen, Student-Faculty Interaction Benchmark

Item	All, Mean (N=336)	White, Mean (N=105)	Hispanic, Mean (N=136)
Discussed grades or assignments with instructor	2.74 (.941)	2.75 (.939)	2.67 (.986)
Talked about career plans with faculty	2.37 (.966)	2.22 (.928)	2.40 (.965)
Discussed ideas from readings with faculty member outside of class	2.12 (1.01)	2.02 (.948)	2.19 (1.07)
Received prompt written or oral feedback from faculty	2.83 (.857)	2.92 (.866)	2.76 (.804)
Worked with faculty members on activities other than coursework	1.71 (.933)	1.50 (.794)	1.82 (.951)
Work on a research project with faculty outside of course	2.21 (.987)	1.99 (.957)	2.24 (.984)

Note: N used is the Valid N for the benchmark by subgroup. Items are on a four-point scale. Parentheses denote Standard Deviation.

In Enriching Educational Environment, the only item under this benchmark that was high was *Encouraging contact among students from different economic, social and ethnic backgrounds* for Hispanic freshmen with a mean score of 3.10 (see Table 12). In the last benchmark, Supportive Campus Environment, the only item with mean scores higher than 3.0 for all three freshmen groups was the item *Providing the support to help you succeed academically* (see Table 13). All freshmen means for this item were 3.16, 3.04 for White freshmen and 3.26 for Hispanic freshmen. All other items fell in the 2.0 range, with the exception of the first three items which are on a 7.0 scale, with item means ranging from 4.71 to 5.58.

Table 12

NSSE Items Means for Freshmen, Enriching Educational Environment Benchmark

Item	All, Mean (N=308)	White, Mean (N=93)	Hispanic, Mean (N=127)
Used an electronic medium	2.55 (1.02)	2.41 (1.05)	2.59 (1.01)
Had serious conversations with students of a different race	2.79 (.977)	2.77 (.913)	2.80 (.979)
Had serious conversations with students who are different in terms of religious beliefs, political opinion or personal values	2.71 (1.01)	2.77 (1.02)	2.67 (1.02)
Practicum, internship, field experience	2.54 (.917)	2.45 (1.00)	2.61 (.820)
Community service or volunteer work	2.77 (1.04)	2.60 (1.07)	2.86 (.994)
Participate in a learning community	2.32 (1.03)	2.11 (1.00)	2.41 (1.03)
Foreign language coursework	2.60 (.997)	2.42 (1.07)	2.67 (.968)
Study abroad	2.22 (.935)	2.16 (.871)	2.19 (.947)
Independent study	2.04 (.940)	1.77 (.772)	2.06 (.987)
Culminating senior experience	2.07 (.993)	1.99 (.971)	2.08 (1.01)
Encouraging contact among students from different economic, social and ethnic backgrounds	2.90 (.968)	2.78 (.919)	3.10 (.950)

Note: N used is the Valid N for the benchmark by subgroup. Items are on a four-point scale. Parentheses denote Standard Deviation.

Table 13

NSSE Items Means for Freshmen, Supportive Campus Environment Benchmark

Item	All, Mean (N=327)	White, Mean (N=100)	Hispanic, Mean (N=133)
*Relationships with other students	5.54 (1.37)	5.55 (1.30)	5.56 (1.39)
*Relationships with faculty members	5.54 (1.34)	5.58 (1.23)	5.51 (1.39)
*Relationships with administrative personnel	4.91 (1.72)	4.71 (1.66)	5.10 (1.71)
Providing the support to help you succeed academically	3.16 (.830)	3.04 (.843)	3.26 (.789)
Helping you cope with your non-academic responsibilities	2.40 (1.02)	2.21 (.952)	2.53 (1.02)
Providing the support you need to thrive socially	2.55 (1.01)	2.31 (.985)	2.65 (.992)

Note: N used is the Valid N for the benchmark by subgroup. Items are on a four-point scale, unless otherwise noted. Parentheses denote Standard Deviation.

*Items are on a seven-point scale.

Table 14

NSSE Items Means for Seniors, Level of Academic Challenge Benchmark

Item	All, Mean (N=318)	White, Mean (N=)	Hispanic, Mean (N=)
Worked harder than you thought you could to meet an instructors standards or expectations	2.84 (.882)	2.76 (.881)	2.93 (.836)
Analyzing the basic elements of an idea, experience or theory	3.29 (.742)	3.29 (.731)	3.29 (.758)
Synthesizing and organizing ideas, information or experiences	3.04 (.849)	3.05 (.829)	3.01 (.792)
Making judgments about the value of information, arguments or methods	3.02 (.865)	2.99 (.839)	3.08 (.907)
Applying theories or concepts	3.21 (.825)	3.16 (.848)	3.28 (.773)
Spending significant amounts of time studying and on academic work	3.11 (7.60)	3.09 (.743)	3.12 (.748)

Note: N used is the Valid N for the benchmark by subgroup. Items are on a four-point scale. Parentheses denote Standard Deviation.

Table 15

NSSE Items Means for Seniors, Active and Collaborative Learning Benchmark

Item	All, Mean	White, Mean	Hispanic, Mean
Asked questions in class	3.17 (.835)	3.21 (.831)	3.09 (.842)
Made a class presentation	2.74 (.898)	2.65 (.888)	2.92 (.901)
Worked with other students on projects during class	2.72 (.867)	2.66 (.879)	2.78 (.831)
Worked with classmates outside of class	2.47 (.904)	2.42 (.908)	2.54 (.903)
Tutored or taught other students	1.65 (.857)	1.59 (.834)	1.60 (.894)
Participated in a community-based project	1.49 (.803)	1.42 (.720)	1.53 (.887)
Discussed ideas from readings with others outside class	2.96 (.872)	2.96 (.875)	2.94 (.857)

Note: N used is the Valid N for the benchmark by subgroup. Items are on a four-point scale. Parentheses denote Standard Deviation.

Table 16

NSSE Items Means for Seniors, Student-Faculty Interaction Benchmark

Item	All, Mean	White, Mean	Hispanic, Mean
Discussed grades or assignments with instructor	2.77 (.874)	2.77 (.854)	2.75 (.878)
Talked about career plans with faculty	2.19 (.954)	2.17 (.946)	2.12 (.885)
Discussed ideas from readings with faculty member outside of class	2.02 (.957)	2.01 (.918)	2.00 (.930)
Received prompt written or oral feedback from faculty	2.83 (.841)	2.84 (.846)	2.78 (.879)
Worked with faculty members on activities other than coursework	1.53 (.843)	1.50 (.841)	1.55 (.901)
Work on a research project with faculty outside of course	2.12 (.894)	2.09 (.842)	2.11 (.889)

Note: N used is the Valid N for the benchmark by subgroup. Items are on a four-point scale. Parentheses denote Standard Deviation.

Table 17

NSSE Items Means for Seniors, Enriching Educational Environment Benchmark

Item	All, Mean	White, Mean	Hispanic, Mean
Used an electronic medium	2.73 (1.01)	2.78 (.998)	2.56 (1.06)
Had serious conversations with students of a different race	2.80 (1.02)	2.81 (1.00)	2.69 (.991)
Had serious conversations with students who are different in terms of religious beliefs, political opinion or personal values	2.65 (1.04)	2.66 (1.01)	2.65 (1.02)
Practicum, internship, field experience	2.81 (.916)	2.75 (.928)	2.99 (.814)
Community service or volunteer work	2.86 (1.05)	2.77 (1.06)	2.95 (1.02)
Participate in a learning community	2.29 (1.00)	2.27 (.947)	2.35 (1.04)
Foreign language coursework	2.51 (1.07)	2.46 (1.04)	2.70 (1.10)
Study abroad	2.00 (.746)	1.98 (.716)	2.05 (.719)
Independent study	2.02 (.814)	2.06 (.812)	2.00 (.816)
Culminating senior experience	2.41 (.943)	2.37 (.917)	2.40 (.922)
Encouraging contact among students from different economic, social and ethnic backgrounds	2.70 (.984)	2.70 (.981)	2.74 (.943)

Note: N used is the Valid N for the benchmark by subgroup. Items are on a four-point scale. Parentheses denote Standard Deviation.

Table 18

NSSE Items Means for Seniors, Supportive Campus Environment Benchmark

Item	All, Mean	White, Mean	Hispanic, Mean
*Relationships with other students	5.53 (1.38)	5.49 (1.32)	5.70 (1.37)
*Relationships with faculty members	5.51 (1.35)	5.58 (1.36)	5.38 (1.43)
*Relationships with administrative personnel	4.36 (1.82)	4.36 (1.87)	4.24 (1.78)
Providing the support to help you succeed academically	2.88 (.847)	2.92 (.822)	2.85 (.855)
Helping you cope with your non-academic responsibilities	1.94 (.961)	1.87 (.933)	2.10 (.991)
Providing the support you need to thrive socially	2.19 (.990)	2.10 (.975)	2.34 (.997)

Note: N used is the Valid N for the benchmark by subgroup. Items are on a four-point scale, unless otherwise noted. Parentheses denote Standard Deviation.

*Items are on a seven-point scale.

Comparison of Benchmark Means (t-tests)

Next, this study explored whether there was any significant difference between various groups when measuring for engagement. First, the difference in the benchmark means between freshmen and seniors was explored (see Tables 19 and 20). Descriptive statistics were conducted to learn the mean for each benchmark. Further, the data were split into freshmen and seniors and then select cases were run for both White and Hispanic students. The results provided the means for the following groups: all freshmen, all seniors, White freshmen, White seniors, Hispanic freshmen and Hispanic seniors. These statistics are located in tables 19-20. Benchmark means are on a scale of 0 to 100. In this study, the means provided helped in determining if Hispanics have a better student engagement means, as studied through the five benchmarks, than their White counterparts. Further, the means helped explore the difference between freshmen and

seniors. Statistically significant results were determined in the following section when t-tests were conducted to compare various groups. Further exploration is done to determine if the benchmarks are predictive of student success when running multiple regressions.

According to freshmen benchmark means (see Table 19), Hispanic students closely resembled NEIU means. In addition, Supportive Campus Environment (SCE) was the highest mean for Hispanic students and was higher than Whites and the overall means. This doesn't imply what was happening for Hispanic students was necessarily positive; it simply indicates they had a higher mean compared to their White peers mean.

For seniors (see Table 20), Hispanic students closely resembled the means for all NEIU respondents. Lastly, NEIU seniors in all subgroups (Hispanic, White and all) have more similar means than the freshmen in the previous table. Hispanic seniors scored higher than their White peers on Active and Collaborative Learning and Supportive Campus Environment.

Table 19

NSSE Benchmarks Comparison Means for Freshmen

Benchmark	Hispanic	White	All
Level of Academic Challenge	55	54	55
Active and Collaborative Learning	45	40	44
Student-Faculty Interaction	39	37	39
Enriching Educational Experiences	26	25	26
Supportive Campus Environment	67	60	64

Note: Scores are provided by NSSE and are on a 100-point scale.

Table 20

NSSE Benchmark Comparison Means for Seniors

Benchmark	Hispanic	White	All
Level of Academic Challenge	55	55	56
Active and Collaborative Learning	50	47	48
Student-Faculty Interaction	36	36	36
Enriching Educational Experiences	30	30	30
Supportive Campus Environment	58	56	56

Note: Scores are provided by NSSE and are on a 100-point scale.

Next, t-tests were conducted to learn if there was a statistically significant difference between various subgroups. Subgroups were divided into freshmen vs. seniors, followed by White freshmen vs. Hispanic freshmen and White seniors vs. Hispanic seniors. P values represent two-tailed tests.

Freshmen versus Seniors

Research Question # 2. Is there a statistical difference in engagement between all freshmen and all seniors?

An independent-samples t-test was conducted to compare the five NSSE benchmarks (i.e. engagement) for freshmen versus seniors, located in Table 21. There was a significant difference in Active and Collaborative Learning (ACL) for seniors had higher scores (M=48.7, SD=16.8) than freshmen (M=43.8, SD=17.5); $t(753)=-4.38$, $p=.000$. There was a significant difference in Enriching Educational Experiences (EEE) in which seniors were significantly higher (M=29.8, SD=15.5) than freshmen (M=26.1,

SD=13.5); $t(789)=-3.86$, $p=.000$. These results suggest that seniors have higher levels of engagement as measured through both Active and Collaborative Learning and Enriching Educational Environment. Student-Faculty Interaction approaches significance, with a $p=.052$. Finally, there was a significant difference in Supportive Campus Environment (SCE) for freshmen were higher ($M=64.3$, $SD=20.2$) than seniors ($M=56.7$, $SD=20.0$); $t(979)=5.64$, $p=.000$.

Table 21

T-test, Freshmen vs. Seniors

Benchmark	Mean, freshmen	Mean, seniors	<i>t</i>	<i>df</i>	Sig. (2- tailed)
Level of Academic Challenge	55.1 (13.3)	55.4 (14.07)	-.399	1020	.690
Active and Collaborative Learning	43.8 (17.5)	48.73 (16.8)	-4.43	1072	.000*
Student-Faculty Interaction	39.1 (20.5)	36.6 (18.7)	1.94	1030	.052
Enriching Educational Experiences	26.1 (13.5)	29.8 (15.5)	-3.70	1002	.000*
Supportive Campus Environment	64.3 (20.2)	56.7 (20.0)	5.64	979	.000*

Note. * $p \leq .001$. Standard Deviations appear in parentheses below means.

White Freshmen versus Hispanic Freshmen

Research Question # 3: Is there a statistical difference in engagement between White freshmen and Hispanic freshmen?

There is a significant difference in Active and Collaborative Learning for Hispanic freshmen ($M=44.8$, $SD=18.6$) who scored higher than White freshmen ($M=40.3$, $SD=17.6$); $t(252)=-2.01$, $p=.045$ as indicated in Table 22. Lastly, there was a

significant difference in Supportive Campus Environment, in which Hispanic freshmen again had higher significant means ($M=66.8$, $SD=20.7$) compared to White freshmen ($M=60.8$, $SD=19.12$); $t(226)=-2.28$, $p=.023$. Among freshmen, Hispanic students were found to have significantly higher levels of engagement in two of the five benchmarks (Active and Collaborative Learning and Supportive Campus Environment). There was no significant difference between groups and Level of Academic Challenge, Student-Faculty Interaction and Enriching Educational Experiences.

Although Hispanic freshmen were found to have statistically higher engagement means than White freshmen, this was not the case when comparing GPA (see Table 23). White freshmen were found to have significantly higher GPA with a p level of .001 ($M=3.21$, $SD=.715$) than Hispanic freshmen ($M=2.91$, $SD=.789$). Hispanic freshmen could of scored higher levels of engagement due to the additional academic support needed due to low GPA.

Table 22

T-test, White Freshman Engagement vs. Hispanic Freshman Engagement

Benchmark	Mean, White Freshman	Mean, Hispanic Freshman	<i>t</i>	<i>df</i>	Sig. (2- tailed)
Level of Academic Challenge	54.7 (12.4)	55.5 (13.5)	-.496	246	.621
Active and Collaborative Learning	40.3 (17.6)	44.8 (18.6)	-2.00	267	.047*
Student-Faculty Interaction	37.0 (19.0)	39.3 (21.8)	.856	250	.393
Enriching Educational Experiences	25.1 (12.1)	25.9 (13.5)	-.520	245	.603
Supportive Campus Environment	60.8 (19.1)	66.8 (20.7)	-2.25	236	.025*

Note. *= $p \leq .05$. Standard Deviations appear in parentheses below means.

Table 23

T-test, White Freshman GPA vs. Hispanic Freshman GPA

Variable	Mean, White freshmen	Mean, Hispanic freshmen	<i>t</i>	<i>df</i>	Sig. (2- tailed)
Grade Point Average	3.21 (.715)	2.91 (.789)	3.30	268	.001**

Note. **= $p \leq .01$. Standard Deviations appear in parentheses below means.

White Seniors versus Hispanic Seniors

Research Question # 4: Is there a statistical difference in engagement between White seniors and Hispanic seniors?

When comparing White seniors versus Hispanic seniors engagement means, there was no significant difference across all five benchmarks. Table 24 provides output of the 2-tailed *p* scores for all five benchmarks. However, there was a significant difference in

GPA between White seniors and Hispanic seniors (see Table 25). White seniors had to higher significant means, with a p value of .008 (M=3.28, SD=.554), compared to Hispanic seniors (M=3.15, SD=.467). Further exploration of GPA and engagement will be discussed in future sections.

Table 24
T-test, White Seniors vs. Hispanic Seniors

Benchmark	Mean, White seniors	Mean, Hispanic seniors	<i>t</i>	<i>df</i>	Sig. (2- tailed)
Level of Academic Challenge	55.5 (13.7)	55.2 (13.7)	.245	311	.806
Active and Collaborative Learning	47.4 (16.6)	49.7 (16.5)	-1.44	322	.151
Student-Faculty Interaction	36.0 (18.1)	35.8 (18.5)	.142	302	.888
Enriching Educational Experiences	29.7 (15.4)	29.8 (15.7)	-.041	288	.968
Supportive Campus Environment	56.0 (19.6)	58.2 (19.8)	-1.07	291	.283

Note. *= $p \leq .05$. Standard Deviations appear in parentheses below means.

Table 25
T-test, White Senior GPA vs. Hispanic Senior GPA

Variable	Mean, White Seniors	Mean, Hispanic Seniors	<i>t</i>	<i>df</i>	Sig. (2- tailed)
Grade Point Average	3.28 (.554)	3.15 (.467)	2.67	375	.008**

Note. **= $p \leq .01$. Standard Deviations appear in parentheses below means.

Student Engagement and GPA

Several regressions were conducted to explore the relationship between gender, ethnicity, class level (freshmen and seniors) and engagement to GPA. White students were used as the reference group. Age is not of primary interest; therefore age was entered as a covariate to control for the variance due to the difference in age. Second, gender was entered as an independent variable of interest. Ethnicity and class were entered as independent variables in the first two regressions but were later removed when researching specific ethnic groups White and Hispanic and breaking out the class by freshmen and seniors. Third, the five NSSE benchmarks were entered (i.e. student engagement) as independent variables. Because the primary focus of this research explores Hispanic students and engagement, the regressions were split by class to learn more about Hispanic freshmen and Hispanic seniors. To compare, the regressions were split by ethnicity to learn more about all respondents and White students. An alpha level of .05 was used for all statistical tests. The next section will review the results from all students.

GPA and Engagement for All Respondents

Another multiple regression was conducted to learn more about all respondents, controlling for the effects of gender, ethnicity, class level and engagement on all students' NEIU cumulative GPA. Therefore, gender, ethnicity, class and the five NSSE benchmarks were used as predictors. The first equation produced some significant results and predicted for 8.7% of the variance in this model (see Table 26).

B, also known as the regression coefficients represents the independent contributions of each independent variable to the prediction of the dependent variable.

The B measurement associated with each variable is given in terms of the units of this variable. For GPA, the unit would be points. If the regression coefficient was positive, then there was a positive relationship between the independent variable and GPA. If this value was negative, then there was a negative relationship between the independent variable and GPA. We can more specifically determine the relationship between age and GPA by looking at the beta coefficient for age. If $B = .008$, for example, then that would mean that for one year increase in age, GPA would increase by .008 points.

Gender was found to negatively predict NEIU GPA for males, with a p value of .013, $B = .103$. The results also showed that ethnicity was associated with lower NEIU GPA. Asian students were negatively associated to NEIU GPA ($p = .027$). Black students were also negatively associated to NEIU GPA ($p = .000$) as were Hispanic ($p = .000$) students. This means that students who identified as Black, Asian or Hispanic were linked to lower GPA's.

Level of Academic Challenge ($B = .004$) and Active and Collaborative Learning ($B = .004$) were both positively associated with NEIU GPA (see Table 24). Therefore, if a student was more engaged in Level of Academic Challenge ($p = .009$) or Active and Collaborative Learning ($p = .020$), they were more likely to have a higher GPA. As student engagement (as identified by the two benchmarks) increased, so did GPA. The other three benchmarks (Student-Faculty Interaction, Enriching Educational Experiences, Supportive Campus Environment) were not significant at the $p > .05$ level.

Table 26

Prediction of Student GPA for All Respondents, NSSE 2010

Variable	<i>B</i>	Sig.
Age	.008	.004**
Gender	-.103	.013*
Asian	-.155	.027*
Black	-.363	.000**
Hispanic	-.240	.000**
Level of Academic Challenge	.004	.009**
Active and Collaborative Learning	.004	.020*
Student-Faculty Interaction	-.003	.070
Enriching Educational Experiences	.002	.257
Supportive Campus Environment	.002	.114

*Significant at the .05 level

**Significant at the .01 level

GPA and Engagement for Freshmen

Research Question # 5. For all freshmen who completed the 2010 NSSE survey, what is the relationship between the five NSSE benchmarks and their cumulative NEIU grade point average?

The second regression used age, gender, ethnicity, and the five NSSE benchmarks as independent variables and NEIU GPA as the dependent variable for freshmen. This equation produced some significant results and predicted 38% of the variance. The results of the regression showed that gender, ethnic groups Black and Hispanic students, and Supportive Campus Environment were significant for freshmen in this model (see Table

27). Gender was significant in predicting negative GPA for males (women had a higher GPA means than their male counterparts) ($B=-.185$), with a $p=.025$.

In addition, Black and Hispanic students were also found to be negatively associated with NEIU GPA, Blacks with a p value of .007 ($B=-.528$) and Hispanics with a p value of .000 ($B=-.371$). In this model, freshmen who identified as Black and Hispanic were more likely to be associated with lower GPA. Supportive Campus Environment was found to be positively associated with higher GPA as well for freshmen, with a $p=.048$. This means for every unit the student was engaged, their GPA increased .005 points. Therefore, as freshmen were more engaged as measured through Supportive Campus Environment, they were more likely to have had a higher GPA. The other four benchmarks were not significant for the freshman sub-group.

Table 27

Prediction of Student GPA for All Freshmen, NSSE 2010

Variable	<i>B</i>	Sig.
Age	.019	.060
Gender	-.185	.025*
Asian	-.142	.295
Black	-.528	.007**
Hispanic	-.371	.000**
Level of Academic Challenge	.004	.308
Active and Collaborative Learning	.004	.245
Student-Faculty Interaction	-.004	.149
Enriching Educational Experiences	.006	.113
Supportive Campus Environment	.005	.048*

*Significant at the .05 level

**Significant at the .01 level

GPA and Engagement for Seniors

Research Question # 6. For all freshmen who completed the 2010 NSSE survey, what is the relationship between the five NSSE benchmarks and their cumulative NEIU grade point average?

The third regression to predict GPA used age, gender, ethnicity and the five benchmarks for student engagement as independent variables. GPA served as the dependent variable. The equation produced many significant results and predicted 25.7% of the variance. More variables were found to significantly predict GPA for seniors than freshmen (see Table 28). Unlike the freshman group, Asian seniors predicted lower NEIU

GPA, with a p value equal to .01 ($B = -.203$). Similar to freshmen, being Black ($p = .000$, $B = -.296$) and Hispanic ($p = .004$, $B = -.158$) significantly predicted lower GPA.

In addition, two of the five benchmarks were positively associated to GPA for seniors. Level of Academic Challenge predicted positive GPA, with a p value of .011. For each unit a student increased in Level of Academic Challenge, their GPA was likely to improve .005 points. Active and Collaborative Learning also predicted an increase in GPA, with a p value of .041. The more engaged the seniors were in Active and Collaborative Learning, their GPA's were more likely to increase .003 points. For both benchmarks, the more seniors were engaged, the more likely their GPA were to increase. The remaining three benchmarks were not significantly associated with GPA for seniors.

Table 28

Prediction of Student GPA for All Seniors, NSSE 2010

Variable	<i>B</i>	Sig.
Age	.006	.039*
Gender	-.064	.162
Asian	-.203	.010**
Black	-.296	.000**
Hispanic	-.158	.004**
Level of Academic Challenge	.005	.011*
Active and Collaborative Learning	.003	.041*
Student-Faculty Interaction	-.002	.215
Enriching Educational Experiences	.000	.920
Supportive Campus Environment	.000	.742

*Significant at the .05 level

**Significant at the .01 level

GPA and Engagement for Hispanic Freshmen and Hispanic Seniors

Research Question # 7: For all Hispanic freshmen who completed the 2010 NSSE survey, what is the relationship between the five NSSE benchmarks and their cumulative NEIU grade point average?

Research Question #8. For all Hispanic seniors who completed the 2010 NSSE survey, what is the relationship between the five NSSE benchmarks and their cumulative NEIU grade point average?

The fourth and fifth regressions gave us a closer look at Hispanic students, both freshmen and seniors. For this model, age, gender, and the five NSSE benchmarks were used as independent variables and GPA was used as the dependent variable. The model for Hispanic freshmen predicted 35.2% of the variance, while the model for Hispanic seniors predicted 21.7% of the variance. Unfortunately the results for both freshmen and seniors showed no significance across all variables (see Tables 29 and 30). None of the independent variables significantly predicted NEIU GPA for Hispanic freshmen or seniors.

Table 29

Prediction of Student GPA for Hispanic Freshmen, NSSE 2010		
Variable	<i>B</i>	Sig.
Age	.014	.407
Gender	-.131	.346
Level of Academic Challenge	.005	.415
Active and Collaborative Learning	.008	.160
Student-Faculty Interaction	-.002	.705
Enriching Educational Experiences	.000	.943
Supportive Campus Environment	.006	.083

*Significant at the .05 level

**Significant at the .01 level

Table 30

Prediction of Student GPA for Hispanic Seniors, NSSE 2010		
Variable	<i>B</i>	Sig.
Age	.007	.193
Gender	.095	.294
Level of Academic Challenge	.002	.634
Active and Collaborative Learning	.001	.746
Student-Faculty Interaction	-.005	.098
Enriching Educational Experiences	.005	.134
Supportive Campus Environment	.002	.393

*Significant at the .05 level

**Significant at the .01 level

GPA and Engagement for White Freshmen and White Seniors

Research Question # 9: For all White freshmen who completed the 2010 NSSE survey, what is the relationship between the five NSSE benchmarks and their cumulative NEIU grade point average?

Research Question # 10: For all White seniors who completed the 2010 NSSE survey, what is the relationship between the five NSSE benchmarks and their cumulative NEIU grade point average?

The sixth and seventh regression (see Tables 31 and 32) were conducted to learn more about White freshmen and seniors. Age, gender and the five NSSE benchmarks were used as independent variables and GPA was used as the dependent variable. The model for White freshmen produced some significant results and predicted 42.6% of the variance. Contrary to Hispanic students (both freshmen and seniors), there were two significant results with White freshmen (see Table 31). Student-Faculty Interaction significantly predicted lower GPA for White freshmen, with a p value of .007. However Enriching Educational Experiences significantly predicted higher GPA for White freshmen, with a p value of .033. No other variables were significant for White freshmen. In fact, no independent variables significantly predicted GPA for White seniors in this model (see Table 32).

Table 31

Prediction of Student GPA for White Freshmen, NSSE 2010		
Variable	<i>B</i>	Sig.
Age	.026	.158
Gender	-.321	.017*
Level of Academic Challenge	.003	.664
Active and Collaborative Learning	.006	.302
Student-Faculty Interaction	-.015	.007**
Enriching Educational Experiences	.015	.033*
Supportive Campus Environment	.008	.056

*Significant at the .05 level

**Significant at the .01 level

Table 32

Prediction of Student GPA for White Seniors, NSSE 2010		
Variable	<i>B</i>	Sig.
Age	.007	.053
Gender	-.101	.143
Level of Academic Challenge	.005	.098
Active and Collaborative Learning	.004	.139
Student-Faculty Interaction	-.001	.762
Enriching Educational Experiences	-.001	.700
Supportive Campus Environment	-.001	.442

*Significant at the .05 level

**Significant at the .01 level

Student Engagement and Retention

The purpose of this section is to examine the relationship between student engagement and fall-to-fall retention of first year students at Northeastern. The sample consisted of students that were classified as freshmen and who had completed the National Survey of Student Engagement (NSSE). A binary logistic regression analysis

was conducted to predict retention using pre-college characteristics and NSSE benchmarks.

As mentioned in Chapter 4, seniors were omitted from this section, given the high proportion of transfer students and that although Northeastern classifies seniors by 90-120 credits, seniors are more likely to vary in terms of retention and graduation making it difficult to use engagement as a predictor. Age, GPA, gender, ACT, ethnicity (dummy coded as indicated in the previous regressions) and the five NSSE benchmarks were used as the independent variables. Retention served as the dependent variable. Retention was defined as freshmen entering in the fall 2009 term who returned in the subsequent fall 2010 term.

Retention of All Freshmen

Research Question #11: For all freshmen who completed the 2010 NSSE survey, what is the relationship between the five NSSE benchmarks and student retention the following year (fall 2010)?

Of the total freshmen, 296 returned and 95 did not. A test of the full model (Table 33) against a constant only model was statistically significant, indicating that the predictors as a set reliably distinguished between retained and not-retained students. Freshmen who have a higher ACT are less likely to be retained by almost 19% ($e^{-.205}=0.814$, $p<.000$). While higher ACT is commonly shown to be a predictor of retention (Reason, 2009), it should be noted this negative effect causes NEIU to lose students at a higher rate. In addition, freshmen who have a higher GPA have 4 times greater odds of being retained ($e^{1.43}=4.20$, $p<.000$) than those with lower GPA's. This positive effect shows that Northeastern retention is more dependent on those students with higher GPA

than ACT. The Wald criterion demonstrated that only GPA ($p=.000$) and ACT scores ($p=.000$) made a significant contribution to prediction. ACT and GPA were the only predictors of retention, while ethnicity and the five NSSE benchmarks were not significant predictors of retention for all freshmen.

Table 33

Engagement and Retention, All Freshmen

Variable	<i>B</i>	S.E.	Wald	df	Sig.	Exp(B)
GPA	1.43	.259	30.7	1	.000*	4.20
ACT	-.205	.055	14.1	1	.000*	.814
Gender	-.605	.392	2.38	1	.123	.546
Black	-.186	1.07	.030	1	.863	.830
Asian	.922	.610	2.28	1	.131	2.51
Hispanic	.279	.460	.367	1	.544	1.32
Other	.658	.634	1.07	1	.299	1.93
Level of Academic Challenge	-.020	.017	1.39	1	.237	.980
Active and Collaborative Learning	.019	.017	1.28	1	.257	1.01
Student-Faculty Interaction	-.012	.014	.711	1	.399	.988
Enriching Educational Experiences	.016	.018	.798	1	.372	1.01
Supportive Campus Environment	.013	.010	1.48	1	.224	1.01

*Indicates significant value $p<.05$

Retention of Hispanic Freshmen

Research Question #12: For all Hispanic freshmen who completed the 2010 NSSE survey, what is the relationship between the five NSSE benchmarks and student retention the following year (fall 2010)?

Age, GPA, ACT score, gender and the five NSSE benchmarks were used as independent variables in this logistic regression for Hispanic freshmen (see Table 34).

Retention continues to serve as the dependent variable. A test of the full model was statistically significant, indicating that the predictors as a set reliably distinguished between retained and non-retained students. Hispanic freshmen who had a higher GPA had almost 3 times greater odds ($e^{1.14}=3.12$, $p<.001$) to be retained than those with lower GPA's. This finding was similar to the findings for all freshmen in that GPA had a positive effect on retention. The more likely Hispanic freshmen were to have a higher GPA, the more likely they were to return the following year. The Wald criterion demonstrated that only GPA ($p=.002$) made a significant contribution to prediction for Hispanic freshmen. ACT, gender and the five NSSE benchmarks were not significant in this model.

Table 34

Engagement and Retention, Hispanic Freshmen						
Variable	<i>B</i>	S.E.	Wald	df	Sig.	Exp(B)
GPA	1.14	.370	9.50	1	.002*	3.12
ACT	-.156	.088	3.16	1	.075	.855
Gender	-.412	.599	.473	1	.492	.662
Level of Academic Challenge	.003	.025	.014	1	.906	1.00
Active and Collaborative Learning	.029	.025	1.35	1	.244	1.02
Student-Faculty Interaction	-.005	.020	.053	1	.818	.995
Enriching Educational Experiences	-.020	.030	.415	1	.519	.981
Supportive Campus Environment	.000	.016	.001	1	.977	1.00

*Indicates significant value $p<.05$

Retention of White Freshmen

Research Question #13: For all White freshmen who completed the 2010 NSSE survey, what is the relationship between the five NSSE benchmarks and student retention the following year (fall 2010)?

A test of the full model for White freshmen against a constant only model was statistically significant, indicating that the predictors as a set reliably distinguished between those retained and those not-retained. In this model for White freshmen, both GPA and ACT were significant in predicting retention (see table 35). White freshmen who had a higher GPA had almost 9 times greater odds ($e^{2.19}=8.96$, $p<.001$) of being retained than those with lower GPA's. This finding is consistent in the past two models predicting retention for all freshmen and Hispanic freshmen. The findings also suggest that White freshmen who had a higher ACT were less likely to be retained by almost 25% ($e^{-.293}=.746$, $p<.01$). This finding is similar to the finding for all freshmen, in which case a higher ACT scores suggested the student was more likely to depart Northeastern. Neither gender nor any of the five benchmarks were significant predictors of retention.

Table 35

Engagement and Retention, White Freshmen

Variable	<i>B</i>	S.E.	Wald	df	Sig.	Exp(B)
GPA	2.19	.663	10.9	1	.001*	8.96
ACT	-.293	.106	7.65	1	.006*	.746
Gender	-1.59	.913	3.05	1	.081	.203
Level of Academic Challenge	.011	.040	.077	1	.782	1.01
Active and Collaborative Learning	.000	.034	.000	1	.992	1.00
Student-Faculty Interaction	-.025	.033	.572	1	.450	.975
Enriching Educational Experiences	.031	.036	.774	1	.379	1.03
Supportive Campus Environment	.015	.022	.482	1	.488	1.01

*Indicates significant value $p < .05$

Summary

In summary, comparison means conducted through t-tests showed statistically significant differences between freshmen and seniors, with seniors scoring higher means in Active and Collaborative Learning and Enriching Educational Experiences. However, freshmen did score a higher and statistically significant difference over seniors when comparing Supportive Campus Environment benchmark. Although there was no significant difference between White and Hispanic seniors, Hispanic freshmen did show significant difference over White freshmen in both Active and Collaborative Learning and Supportive Campus Environment. The two benchmarks, which were not significant across all t-tests, were Supportive Campus Environment and Academic Challenge.

Beyond showing significant difference in student engagement means between subgroups, there were also statistically significant findings in the multiple regressions run

to learn if engagement predicts GPA. Ethnicity, more specifically Asian, Black and Hispanic students were found to predict lower NEIU GPA than White students. Level of Academic Challenge and Active and Collaborative Learning were positively associated with GPA for all respondents. For overall freshmen, females and Supportive Campus Environment were found to positively predict GPA, while ethnic groups Blacks and Hispanics were again found to predict lower GPA compared to White freshmen. Ethnicity was also found to negatively impact seniors. Black and Hispanic seniors were also associated with lower GPA compared to White seniors. However, both Level of Academic Challenge and Active and Collaborative Learning were found to predict higher GPA for all seniors.

While there was no statistical significance for Hispanic freshmen or Hispanic seniors, White freshmen experienced the opposite. Student-Faculty Interaction predicted lower GPA for White freshmen however Enriching Educational Environment predicted higher GPA for White freshmen. There were no statistical significant findings for White seniors.

Lastly, there were some significant regressions predicting retention for freshmen. Higher GPA was found to positively predict retention for all freshmen, including sub-groups Hispanic freshmen and White freshmen, with up to 9% greater odds for White freshmen. However, higher ACT scores negatively predicted retention for all freshmen and White freshmen, finding that the higher ACT scores a freshmen had, the more likely they were to not return to Northeastern Illinois University the following fall term. Gender and the five NSSE benchmarks did not significantly predict retention for any freshmen, including both sub-groups.

Chapter 5

FINDINGS AND CONCLUSIONS

The purpose of this study was to learn about the relationship between Hispanic students attending Northeastern Illinois University and student engagement. Student engagement was defined as the amount of time and effort students put toward their studies and other educationally purposeful activities (Kuh et al., 2006; Kuh et al., 2006b). Further, student engagement is defined as the learning opportunities and experiences provided by the institution. This study used data to learn about Hispanic students who completed the 2010 NSSE at Northeastern Illinois University. In addition, the researcher hoped to learn if student engagement predicted academic success of Hispanic students attending Northeastern Illinois University. In past research, student engagement has been linked to higher academic success and has had positive impact on GPA, higher retention rates and even graduation (Kuh et al., 2006b). For the purposes of this research, academic success was defined as grade point average and retention (for freshmen only).

Northeastern Illinois University is classified as a Hispanic Serving Institution (HSI), a type of Minority Serving Institution that has an enrollment of at least 25% Hispanic students, which qualifies it for the federal designation of HSI. Researchers argue that although these groupings of institutions are ‘serving’ Hispanic students, they are not adequately serving the Hispanic students they enroll in terms of student success (Garcia et al., 2004; Laird et al., 2007). While this topic of ‘serving’ needs further research exploration, the purpose of this study was to learn descriptively about Hispanic students attending Northeastern Illinois University and to explore the connections between their success and student engagement.

In 2009, Hispanic students at Northeastern Illinois University had a six-year graduation rate of 16.6%, compared to an overall graduation rate of 20.1%. These rates compare unfavorably to the 58% graduation rate at the national level (Knapp et al., 2012). In addition, Hispanic student retention for freshmen at Northeastern Illinois University from fall 2009 to fall 2010 was 64%, compared to 68.9% for all freshmen at Northeastern Illinois University and compared to 76% nationally (www.higherinfo.org). These statistics demonstrate that Hispanic students continue to face challenges to obtaining a higher education. This study provided meaningful insight into whether student engagement could help Hispanic students succeed.

This research focused on three main questions: 1) Was there a significant difference among student subgroups in terms of student engagement as measured through NSSE; 2) Does student engagement predict grade point average for Hispanic students; and 3) Does student engagement predict retention for Hispanic freshmen? These research questions were expanded to learn more between freshmen and seniors and to provide comparison data between sub-groups Hispanics, Whites and all respondents at NEIU. Student engagement was measured through the five Benchmarks of Effective Educational Practice. These benchmarks are based on 42 questions from the NSSE survey that collect information on the student experience.

1. Level of Academic Challenge (LAC)
2. Active and Collaborative Learning (ACL)
3. Student-Faculty Interaction (SFI)
4. Enriching Educational Experiences (EEE)
5. Supportive Campus Environment (SCE)

This chapter provides a summary of the findings and provides a discussion on how the findings fit into future action for Northeastern Illinois University. This chapter is divided into six sections. The first section provides an overview of all findings. The next three sections are a review of the main research questions including how the findings fit into the topic of Hispanics and engagement. The fifth section discusses the implications and importance for future research at Northeastern. The sixth and final section will include concluding remarks.

Summary of Findings

Overall, the findings showed the results were counterintuitive to the existing research discussing engagement and student success. First, several descriptive items were learned. One interesting finding was the large difference between the freshmen and the seniors surveyed. Of the total freshmen respondents, 89.5% were native to NEIU, meaning they began their collegiate experience at NEIU directly after high school. In contrast, only 16.7% of seniors were native to NEIU, with the remaining 83.3% entering NEIU as transfers. This trend of a higher proportions of transfer students in the senior class was common for both White and Hispanic seniors. This finding further presents itself when discussing engagement and student retention.

Beyond descriptive data, the research showed that some of the benchmarks measuring engagement predicted GPA for all respondents, all freshmen, all seniors, and White freshmen. Yet, this was not the case of Hispanic students. The research found that student engagement did not significantly predict GPA for Hispanic freshmen or Hispanic seniors, the primary focus group of this study. In addition, student engagement did not predict retention for Hispanic freshmen. These results are not consistent with prior

research on engagement and GPA, especially when considering Hispanics are historically underserved students (Kuh et al., 2006b; Pascarella et al., 2010; Kuh et al., 2008).

Engagement had positive, statistically significant effects on grades and persistence between the first and second year of study for students from different racial and ethnic backgrounds. Equally important, engagement had compensatory effects for historically underserved students in that they benefited more from participating in educationally purposeful activities in terms of earning higher grades and being more likely to persist. (Kuh et al., 2008, pg. 540)

Engagement is supposed to be linked to GPA and retention, regardless of racial and ethnic backgrounds but this study found that this was not the case for Hispanic students attending Northeastern Illinois University.

Most surprisingly, the research results showed that student engagement was not linked to retention of freshmen overall. Retention was defined as those freshmen entering in the fall 2009 and returning in the fall 2010. While ACT score and freshmen year GPA were linked to retention for some all freshmen and White freshmen, none of the five benchmarks for engagement were linked with retention for Hispanic freshmen. Thus, many of the findings were counterintuitive to the existing literature connecting engagement and student success (Kuh et al., 2008; Kuh et al, 2006; Kuh et al, 2006b; Pascarella et al., 2010).

Discussion on Findings of Comparison Groups

This portion of the research reviews significant differences in engagement between freshmen versus seniors, Hispanic freshmen versus White freshmen and Hispanic seniors versus White seniors. Overall, there was a significant difference

between all seniors and all freshmen in Active and Collaborative Learning, Enriching Educational Experiences and Supportive Campus Environment. Seniors scored higher means in engagement in both Active and Collaborative Learning and Enriching Educational Experiences. However, freshmen had higher levels of engagement than seniors in Supportive Campus Environment. Supportive Campus Environment has been linked to higher engagement levels for Hispanic students in previous research (Andrade and Shoup, 2005). The sense of community and support building are common values within the Hispanic community and it is important that these values carry into the institution.

Overall, seniors have higher levels of engagement than freshmen at Northeastern. It is important to note that while there is a statistical difference between freshmen and seniors (seniors scoring higher means), this does not necessarily translate to seniors being more successful. Further findings of student success in terms of GPA and retention will follow in the next two sections of this study. While it is known that seniors are more likely to have transferred to Northeastern Illinois University, it is more likely these transfers are more knowledgeable about campus services, more invested in a nearing graduation and more likely to have discussions with faculty and utilize campus support systems. These results are neither a negative nor positive reflection on these populations, but rather simply show that there is a difference in means between certain groups of respondents.

When reviewing freshmen, Hispanic students were significantly different than their White counterparts in two benchmarks: Active and Collaborative Learning and Supportive Campus Environment. Specifically, Hispanic freshmen have significantly

higher levels of engagement than White freshmen. This could be due to various programs offered for Hispanic students at the freshmen level such as Proyecto Pa'Lante, an academic success program for new freshmen, or even the support of El Centro, a satellite campus of Northeastern Illinois University, nestled in the Hispanic community in the Westside of Chicago. Both of these programs are centered on entering freshmen or transfers looking to complete general education requirements. Therefore, these programs are not available for seniors, who did not score statistically significant differences in benchmark means.

Discussion of Student Engagement and GPA

Research questions 5-8 focused on how well student engagement was linked to GPA of Northeastern students. Results of the study indicate that engagement had no relationship between engagement and GPA for either Hispanic freshmen or Hispanic seniors. This was the first point of this research in which Hispanic students did not produce statistical findings.

Rather, the findings showed Hispanic students who scored high in the NSSE benchmark means in earlier findings in this research did not have a higher GPA. Hispanic freshmen scored higher means than White freshmen across all five benchmarks and scored higher than all freshmen respondents in two of the benchmarks with equal mean scores on the other three benchmarks. In addition, Hispanic freshmen scored significantly higher in benchmark means compared to White freshmen in two areas: Active and Collaborative Learning and Supportive Campus Environment. Based on the scores, one might think that if engagement did predict GPA for White students, then it would do the same for Hispanic students given their history of statistically higher means. However,

when further exploring if engagement for Hispanics predicted GPA, research found it did not predict GPA, even though engagement did predict GPA for White freshmen in Student-Faculty Interaction and Enriching Educational Experiences. This could be linked with the research finding of Hispanics freshmen and GPA means. Hispanic freshmen had significantly lower GPA means than White students, however Hispanic freshmen engagement means were significantly higher than White freshmen. The difference could be accounted for due to the additional academic support Hispanic freshmen need in order to succeed due to lower GPA like visiting with their professor or visiting with their academic advisor. Since Hispanic freshmen required more academic support, their engagement levels were significantly higher than White freshmen.

While higher engagement means do not directly correlate to higher GPA, the results were surprising in the fact that no independent variable used in the model, including gender, age and all five benchmarks, predicted GPA for both Hispanic freshmen and seniors. Again, the results were found to be counterintuitive to research conducted regarding NSSE and student success in terms of GPA (Kuh et al., 2008; Kuh et al, 2006; Kuh et al, 2006b; Pascarella et al., 2010).

There are several reasons why engagement may not have predicted GPA for Hispanic students. One reason for the finding may be the challenge of self-reporting. This was one recent criticism of NSSE when reporting the validity of the survey instrument (Porter, 2011). Students may state they participated in a class discussion but it could have been few times when really NSSE is asking for more specific instances in which the students may or may not remember. Therefore, while the means appear high, the results as shown in terms of GPA were not significant.

Also, there needs to be a more systematic method for capturing every engagement opportunity and intentionally linking them with student outcomes (Porter, 2011). Just because various resources exist for students, it does not mean the function of each service or event is intentionally linked with a student outcome such as higher GPA. Students may be participating in involvement opportunities, however the research (Wolf-Wendel et al, 2009) shows that the difference between involvement and engagement is the intentional links to student outcomes with engagement. A student may be active in more opportunities that appear to be measured through NSSE benchmarks, but without the intentionality, they may just be involved.

Another reason engagement may not have predicted GPA could be that students are experiencing pockets of engagement, but the engagement opportunities are not systematically institutionalized. Research shows that high impact activities, such as First Year Experience (FYE) courses, writing intensive courses, internships, and service-learning opportunities, to state a few, are more likely to lead to higher levels of engagement (Kuh, 2008). Further, research shows that these forms of activities often result in student success for Hispanic students (Del Rios and Leegwater, 2008). For example, NEIU does offer FYE courses that serve as a general education requirement for all freshmen. FYE courses are also very intentional in learning outcomes per discipline. These courses connect freshmen to an aspect of Chicago and an academic discipline, such as Chicago Rocks, a course on earth sciences in Chicago. In addition to the subject matter, faculty is encouraged to connect the freshmen to various support services. However, the spectrum of these connections vary by professor which means that the experience of one student may be very different than the experience of another student in

the FYE course. Some professors may use some class time to thoroughly tour the library, utilize the ropes course for teambuilding or do more transitional-like activities outside the realm of the subject being taught. Therefore, the transition experiences had by freshmen vary depending on the faculty member, rather than each faculty member being required to complete certain activities related to transition, a common outcome of national FYE courses. This is one example of how intentional opportunities are not systematic even within one area.

Discussion of Student Engagement and Retention of Freshmen

Finally, this research found that student engagement did not increase the odds of student retention for Hispanic freshmen. Not only did the findings show that engagement did not have a relationship with retention for Hispanic freshmen, there was also no relationship between engagement and retention for freshmen respondents including the subgroup White freshmen. Interestingly, GPA did positively predict retention for all freshmen, Hispanic and White freshmen. On the contrary, freshmen who had a higher ACT were more likely to not return their following year.

One reason students did not return could be because they were transferring out. While Northeastern Illinois University has a large population of transfer students (almost 60% of the fall entering class), NEIU also serves as a transfer-out institution for many students. For example, of the fall 2009 cohort, 317 freshmen did not return to Northeastern Illinois University in the fall 2010, accounting for 36.6% of the freshmen class (www.neiu.edu/~irp). Hispanic students alone accounted for 42.9% of those who did not return.

Of the 317 non-returners, 116 freshmen transferred to another institution, accounting for 37% of the attrition. Many students choose to attend Northeastern Illinois University to complete general education requirements or improve their GPA that may be required to attend a different university. Of the 116 freshmen that transferred to another institution, 56 of them transferred to local community colleges accounting for almost 50% of the transfer-outs.

Another rationale for engagement not predicting retention could be found in the lack of prompt academic feedback found within early alert systems. Fortunately, Northeastern Illinois University is currently developing an early alert program that will assist students in learning more about their academic progress through mid-term grade reports, connecting faculty to their academic advisors with class participation updates and providing an increase in feedback directly with the students. Early alert programs are directly connected with the Student-Faculty Interaction benchmark because it allows for prompt feedback, connects the advisor with the student's progress and allows for continuous interactions with faculty and staff.

Implication and Importance of Study

This study takes critical first steps towards exploring the importance of student engagement among Hispanic students attending Northeastern Illinois University. Two main areas of implications are recommended; 1) further research and 2) increased intentionality across services/programs. To begin with, the overall results of this research reveal more questions than answers. According to Porter (2011), the NSSE is too obscure and should be linked back with further evidence. NSSE cannot be the sole assessment in determining student success.

Additional evidence can be found in data obtained from the Cooperative Institutional Research Program first-year survey conducted through the Higher Education Research Institute (www.heri.ucla.edu). The CIRP surveys a range of student characteristics including parental income and education, ethnicity, and other items such as financial aid; secondary school achievement and activities; educational and career plans; and values, attitudes, beliefs, and self-concept. Connecting these survey items with NSSE could help in learning more about the student's pre-college experiences and help control for these variables.

Second, Northeastern Illinois University needs to create more intentional opportunities within existing programs and in the curriculum. One new initiative NEIU (www.neiu.edu/~isp/data/KPI) has implemented is connecting two NSSE benchmarks with institutional Key Performance Indicators (KPI's). Active and Collaborative Learning has been added to the Academic Excellence and Innovation KPI and Supportive Campus Environment was added to the Exemplary Faculty and Staff KPI under NEIU's strategic plan created in 2010. Both KPI's have target values for the newest NSSE survey, administered in Spring 2012. Further implications could be for the strategic plan to further elaborate how these benchmarks will be measured within each strategic goal and what changes or improvements have been made since the implementation of the KPI's to help provide more insight as to what has worked or what did not work in the two year window.

Also, it would be important to determine means of assessing these efforts throughout the year to determine if the initiatives are on track and meeting program outcomes. More departments could utilize the Self Assessment Guides (SAG), commonly

used through the Council for the Advancement of Standards in Higher Education (CAS). SAG's are useful tools to help departments and programs evaluate their efforts without having to spend funds on a consultant and help in providing a framework to explore best practices, and setting priorities.

With such low retention and graduation rates, Northeastern Illinois University needs to implement strategic methods for improving engagement levels of Hispanics. Previous studies such as BEAMS show that intentional programs designed to improve engagement levels of Hispanic students positively impact all students at the institution (Laden, 2004; O'Brien and Zudak, 1998). There needs to be further exploration as to what similar institutions are doing well and implement new/altered initiatives, in addition to reviewing high impact activities and how they can be institutionalized across campus (Kuh, 2008). This work might be currently in the infancy stages within the functions of the new Angelina Pedroso Center for Diversity and Intercultural Affairs (www.neiu.edu/~cdia). The Pedroso Center was newly created in the spring of 2011 and brings together NEIU students, faculty, staff and members of the community to celebrate individual differences, promote dialog on topics of diversity and social justice. Recently, the Pedroso Center has requested ethnic breakdowns of NSSE engagement scores and will utilize this data to help develop a framework of initiatives.

Northeastern may benefit the most by developing a task force to review the status of student engagement across all spectrums. Currently, a few departments at NEIU are beginning to utilize NSSE data independently. A centralized effort may best help create a larger impact. This task force can bridge the results of the NSSE to programs and initiatives connected to the Key Performance Indicators for all students, frameworks

established by the Pedroso Center for various ethnic groups and create recommendations to infuse intentional practices in current high impact activities. The task force can also be linked with a retention task force, student affairs, and even general education task forces. It is important to link various partners in the process early, even as early as the NSSE administration for freshmen. This systematic approach will help ensure intentional change and will also assist in the dissemination of project findings to key constituents.

Future Research and Limitations

Further research is needed to review longitudinal data to determine the long-term implications of student engagement at Northeastern. As of recently, Northeastern Illinois University will administer the NSSE every two years, allowing for time to monitor the benchmark means. This data can also help determine if engagement levels are increasing in Active and Collaborative Learning and Supportive Campus Environment, two areas indicated as Key Performance Indicators in NEIU's strategic plan. Longitudinal data will also assist in further evaluating student engagement and other sub groups such as African American students who are also struggling with retention.

Another recommendation for future research is to create a predictive model that explores each benchmark separately. The current models used in this research use the five benchmarks as independent variables in each model to predict either GPA or retention of freshmen. By dissecting the models and ultimately running additional regressions, we might learn the impact of each individual benchmark. One could even further drill down and explore the individual benchmark items to learn if specific items predict GPA or retention for students.

Future research should also separate the senior cohort into seniors who began at Northeastern and those who transferred into Northeastern Illinois University. Seniors attending NEIU are largely transfer students and may not have experienced various levels of engagement at NEIU nor at their transfer institution. This could have resulted in engagement not predicting GPA and it would be important to learn how these two subsets of seniors compare with one another. One challenge in future research could be the sample size of seniors. NEIU would have to increase its sample size for seniors in order to be able to compare native students and transfers.

Lastly, a final limitation of this research is found in the criticism surrounding NSSE and not adequately assessing the engagement of first-generation and underrepresented students (Porter, 2011). This population lacks social capital and is often unable to properly navigate the web of services within universities. If they cannot navigate the higher education system, then this population cannot properly be engaged as measured through NSSE (Dowd et al., 2011). This challenge might be resolved or improved in the newest NSSE 2.0, set to launch in 2013 (nsse.iub.edu/nsse2013). NSSE 2.0 is said to have refinements in existing measures and scales, including the benchmarks; new measures related to effective teaching and learning; clarity of survey language, including terminology related to technology. It will be important for future research and the usage of longitudinal data to take these changes into account when comparing previous survey results.

Final Remarks

While it is apparent that Northeastern Illinois University has low retention rates, it would behoove the institution to create more intentional opportunities for Hispanic

students to become more engaged. More importantly, a group of administrators, faculty and students need to utilize the NSSE results on an annual basis for two reasons: 1) to compare longitudinal data to determine if institutional practices have helped improve student success and 2) to determine what institutional initiatives need to be created to assist in making a positive change in student engagement levels.

The more Northeastern Illinois University can provide intentional opportunities which are systematically linked through learning outcomes throughout campus, the more likely it will positively impact overall student success. Hispanic enrollment will continue to rise with each U.S. Census and NEIU will have a difficult challenge to help bridge the gap between an increased Hispanic enrollment and lower student success rates. Student success becomes even more important as institutions are under tight fiscal restraints and are being held accountable for not only graduating students, but also ensuring their overall success (Kuh, 2009b; Del Rios and Leegwater, 2008; Pascarella et al., 2010; Bridges et al., 2005; U.S. Department of Education, 2006; Kuh, 2009).

The great news is Northeastern Illinois University administrators and faculty has already begun to develop steps to improve success rates for all its students. This research and any future utilization of NSSE results will further assist the institution. If more questions than answers are created as a result of this research, then the likelihood of further research is certain, thus continuing the conversation of student success. This continued conversation can only lead Northeastern Illinois University in the right direction towards enhancing its critical role in the future of its students.

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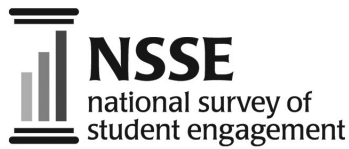
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Benchmarks of Effective Educational Practice

The benchmarks are based on 42 key questions from the NSSE survey that capture many vital aspects of the student experience. These student behaviors and institutional features are some of the more powerful contributors to learning and personal development.

LAC

Level of Academic Challenge

Challenging intellectual and creative work is central to student learning and collegiate quality. Colleges and universities promote high levels of student achievement by emphasizing the importance of academic effort and setting high expectations for student performance.

Activities and conditions:

- Time spent preparing for class (studying, reading, writing, rehearsing, and other activities related to your academic program)
- Worked harder than you thought you could to meet an instructor's standards or expectations
- Number of assigned textbooks, books, or book-length packs of course readings
- Number of written papers or reports of 20 pages or more
- Number of written papers or reports between 5 and 19 pages
- Number of written papers or reports fewer than 5 pages
- Coursework emphasizes: Analyzing the basic elements of an idea, experience, or theory
- Coursework emphasizes: Synthesizing and organizing ideas, information, or experiences
- Coursework emphasizes: Making judgments about the value of information, arguments, or methods
- Coursework emphasizes: Applying theories or concepts to practical problems or in new situations
- Campus environment emphasizes spending significant amounts of time studying and on academic work

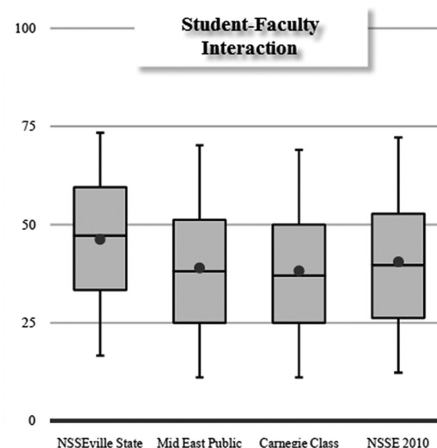
ACL

Active and Collaborative Learning

Students learn more when they are intensely involved in their education and are asked to think about and apply what they are learning in different settings. Collaborating with others in solving problems or mastering difficult material prepares students to deal with the messy, unscripted problems they will encounter daily during and after college.

Activities:

- Asked questions in class or contributed to class discussions
- Made a class presentation
- Worked with other students on projects during class
- Worked with classmates outside of class to prepare class assignments
- Tutored or taught other students
- Participated in a community-based project as part of a regular course
- Discussed ideas from your readings or classes with others outside of class (students, family members, co-workers, etc.)



SFI

Student-Faculty Interaction

Students see first-hand how experts think about and solve practical problems by interacting with faculty members inside and outside the classroom. As a result, their teachers become role models, mentors, and guides for continuous, life-long learning.

Activities:

- Discussed grades or assignments with an instructor
- Talked about career plans with a faculty member or advisor
- Discussed ideas from your readings or classes with faculty members outside of class
- Worked with faculty members on activities other than coursework (committees, orientation, student-life activities, etc.)
- Received prompt written or oral feedback from faculty on your academic performance
- Worked with a faculty member on a research project

SCE

Supportive Campus Environment

Students perform better and are more satisfied at colleges that are committed to their success and cultivate positive working and social relations among different groups on campus.

Conditions:

- Campus environment provides support you need to help you succeed academically
- Campus environment helps you cope with your non-academic responsibilities (work, family, etc.)
- Campus environment provides the support you need to thrive socially
- Quality of relationships with other students
- Quality of relationships with faculty members
- Quality of relationships with administrative personnel and offices

EEE

Enriching Educational Experiences

Complementary learning opportunities inside and outside the classroom augment the academic program. Experiencing diversity teaches students valuable things about themselves and other cultures. Used appropriately, technology facilitates learning and promotes collaboration between peers and instructors. Internships, community service, and senior capstone courses provide students with opportunities to synthesize, integrate, and apply their knowledge. Such experiences make learning more meaningful and, ultimately, more useful because what students know becomes a part of who they are.

Activities and conditions:

- Talking with students with different religious beliefs, political opinions, or values
- Talking with students of a different race or ethnicity
- An institutional climate that encourages contact among students from different economic, social, and racial or ethnic backgrounds
- Using electronic technology to discuss or complete assignments
- Participating in:
 - Internships or field experiences
 - Community service or volunteer work
 - Foreign language coursework
 - Study abroad
 - Independent study or self-assigned major
 - Culminating senior experience
 - Co-curricular activities
 - Learning communities



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Appendix B: Survey Items Contributing to Student Engagement Measures

Academic Effort

- ☐ Number of hours per week spending on preparing for class (studying, reading, writing, rehearsing, and other activities related to your academic program)
- ☐ The frequency of having worked harder than you thought you could to meet an instructor's standards or expectations during the current school year
- ☐ The extent the institution emphasizes spending significant amounts of time studying and on academic work

Higher Order Thinking

- ☐ During the current school year, the extent coursework emphasized analyzing the basic elements of an idea, experience, or theory
- ☐ During the current school year, the extent coursework emphasized synthesizing and organizing ideas, information, or experiences into new, more complex interpretations and relationships
- ☐ During the current school year, the extent coursework emphasized making judgments about the value of information, arguments, or methods
- ☐ During the current school year, the extent coursework emphasized applying theories or concepts to practical problems or in new situations

Academic Integration

- ☐ The frequency of having worked on a paper or project that required integrating ideas or information from various sources
- ☐ The frequency of having included diverse perspectives (difference races, religions, genders, political beliefs, etc.) in class discussions or writing assignments
- ☐ The frequency of having put together ideas or concepts from different courses when completing assignments or during class discussions

Active and Collaborative Learning

- ☐ The frequency of having asked questions in class or contributed to class discussions during the current school year
- ☐ The frequency of having made a class presentation during the current school year
- ☐ The frequency of having worked with other students on projects during class during the current school year
- ☐ The frequency of having worked with classmates outside of class to prepare class assignments during the current school year
- ☐ The frequency of having tutored or taught other students (paid or voluntary) during the current school year
- ☐ The frequency of having discussed ideas from your readings or classes with others outside of class (students, family members, coworkers, etc.) during the current school year
- ☐ The frequency of having participated in a community-based project as part of a regular course

Student Interactions with Faculty Members

- ☐ The frequency of having discussed grades or assignments with an instructor during the current school year
- ☐ The frequency of having talked about career plans with a faculty member or advisor during the current school year
- ☐ The frequency of having discussed ideas from your readings or classes with faculty members outside of class during the current school year
- ☐ The frequency of having worked with faculty members on activities other than coursework (committees, orientation, student life activities, etc.) during the current school year
- ☐ The frequency of having received prompt feedback from faculty on your academic performance (written or oral) during the current school year
- ☐ Have done or plan to work on a research project with a faculty member outside of course or program

requirements before you graduate from your institution

Diversity Experiences

- ☐ The frequency of having had serious conversations with students of a different race or ethnicity than your own during the current school year
- ☐ The frequency of having had serious conversations with students who differ from you in terms of their religious beliefs, political opinions, or personal values during the current school year
- ☐ The extent the institution emphasizes encouraging contact among students from different economic, social, and racial or ethnic backgrounds

Supportive Campus Environment

- ☐ The extent the institution emphasizes providing the support you need to help you succeed academically
- ☐ The extent the institution emphasizes helping you cope with your non-academic responsibilities (work, family, etc.)
- ☐ The extent the institution emphasizes providing the support you need to thrive socially
- ☐ Quality of relationships with other students at your institution
- ☐ Quality of relationships with faculty members at your institution
- ☐ Quality of relationships with administrative personnel and offices at your institution

Quality of Academic Advising (Single item)

- ☐ Evaluate the quality of academic advising you have received at your institution

Gains in Personal and Social Development

- ☐ The extent your college experience contributed to developing a personal code of values and ethics
- ☐ The extent your college experience contributed to understanding people of other racial and ethnic backgrounds
- ☐ The extent your college experience contributed to understanding yourself
- ☐ The extent your college experience contributed to learning effectively on your own
- ☐ The extent your college experience contributed to solving complex real-world problems
- ☐ The extent your college experience contributed to voting in local, state, or national elections
- ☐ The extent your college experience contributed to improving the welfare of your community

Gains in Quantitative, Analytical, and Work-Related Skills

- ☐ The extent your college experience contributed to analyzing quantitative problems
- ☐ The extent your college experience contributed to acquiring job or work-related knowledge and skills
- ☐ The extent your college experience contributed to using computing and information technology
- ☐ The extent your college experience contributed to working effectively with others

Gains in General Education

- ☐ The extent your college experience contributed to writing clearly and effectively
- ☐ The extent your college experience contributed to speaking clearly and effectively
- ☐ The extent your college experience contributed to acquiring broad general education
- ☐ The extent your college experience contributed to thinking critically and analytically

Satisfaction

- ☐ How would you evaluate your entire educational experience at this institution?
- ☐ If you could start over again, would you go to the same institution you are now attending?



National Survey of Student Engagement

The College Student Report

This is a facsimile of the NSSE survey. The layout is similar to the paper version, but questions with a grey background on the last page appear only on the Web version of the survey. Please see nsse.iub.edu/links/surveys for questionnaire samples.

1 In your experience at your institution during the current school year, about how often have you done each of the following?

	Very often	Often	Some-times	Never
a. Asked questions in class or contributed to class discussions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Made a class presentation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Prepared two or more drafts of a paper or assignment before turning it in	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Worked on a paper or project that required integrating ideas or information from various sources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Included diverse perspectives (different races, religions, genders, political beliefs, etc.) in class discussions or writing assignments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Come to class without completing readings or assignments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Worked with other students on projects during class	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. Worked with classmates outside of class to prepare class assignments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. Put together ideas or concepts from different courses when completing assignments or during class discussions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j. Tutored or taught other students (paid or voluntary)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k. Participated in a community-based project (e.g., service learning) as part of a regular course	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
l. Used an electronic medium (listserv, chat group, Internet, instant messaging, etc.) to discuss or complete an assignment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
m. Used e-mail to communicate with an instructor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
n. Discussed grades or assignments with an instructor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
o. Talked about career plans with a faculty member or advisor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
p. Discussed ideas from your readings or classes with faculty members outside of class	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
q. Received prompt written or oral feedback from faculty on your academic performance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
r. Worked harder than you thought you could to meet an instructor's standards or expectations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
s. Worked with faculty members on activities other than coursework (committees, orientation, student life activities, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
t. Discussed ideas from your readings or classes with others outside of class (students, family members, co-workers, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
u. Had serious conversations with students of a different race or ethnicity than your own	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
v. Had serious conversations with students who are very different from you in terms of their religious beliefs, political opinions, or personal values	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2 During the current school year, how much has your coursework emphasized the following mental activities?

	Very much	Quite a bit	Some	Very little
a. Memorizing facts, ideas, or methods from your courses and readings so you can repeat them in pretty much the same form	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Analyzing the basic elements of an idea, experience, or theory, such as examining a particular case or situation in depth and considering its components	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Synthesizing and organizing ideas, information, or experiences into new, more complex interpretations and relationships	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Making judgments about the value of information, arguments, or methods, such as examining how others gathered and interpreted data and assessing the soundness of their conclusions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Applying theories or concepts to practical problems or in new situations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3 During the current school year, about how much reading and writing have you done?

- a. Number of assigned textbooks, books, or book-length packs of course readings
☐ None ☐ 1-4 ☐ 5-10 ☐ 11-20 ☐ More than 20
- b. Number of books read on your own (not assigned) for personal enjoyment or academic enrichment
☐ None ☐ 1-4 ☐ 5-10 ☐ 11-20 ☐ More than 20
- c. Number of written papers or reports of **20 pages or more**
☐ None ☐ 1-4 ☐ 5-10 ☐ 11-20 ☐ More than 20
- d. Number of written papers or reports **between 5 and 19 pages**
☐ None ☐ 1-4 ☐ 5-10 ☐ 11-20 ☐ More than 20
- e. Number of written papers or reports of **fewer than 5 pages**
☐ None ☐ 1-4 ☐ 5-10 ☐ 11-20 ☐ More than 20

4 In a typical week, how many homework problem sets do you complete?

- a. Number of problem sets that take you **more** than an hour to complete
☐ None ☐ 1-2 ☐ 3-4 ☐ 5-6 ☐ More than 6
- b. Number of problem sets that take you **less** than an hour to complete
☐ None ☐ 1-2 ☐ 3-4 ☐ 5-6 ☐ More than 6

5 Mark the box that best represents the extent to which your examinations during the current school year have challenged you to do your best work.

Very little Very much

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7

6 During the current school year, about how often have you done each of the following?

- | | Very often | Often | Some times | Never |
|--|--------------------------|--------------------------|--------------------------|--------------------------|
| a. Attended an art exhibit, play, dance, music, theater, or other performance | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Exercised or participated in physical fitness activities | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Participated in activities to enhance your spirituality (worship, meditation, prayer, etc.) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d. Examined the strengths and weaknesses of your own views on a topic or issue | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e. Tried to better understand someone else's views by imagining how an issue looks from his or her perspective | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| f. Learned something that changed the way you understand an issue or concept | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

7 Which of the following have you done or do you plan to do before you graduate from your institution?

- | | Done | Plan to do | Do not plan to do | Have not done |
|--|--------------------------|--------------------------|--------------------------|--------------------------|
| a. Practicum, internship, field experience, co-op experience, or clinical assignment | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Community service or volunteer work | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Participate in a learning community or some other formal program where groups of students take two or more classes together | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d. Work on a research project with a faculty member outside of course or program requirements | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e. Foreign language coursework | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| f. Study abroad | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| g. Independent study or self-designed major | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| h. Culminating senior experience (capstone course, senior project or thesis, comprehensive exam, etc.) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

8 Mark the box that best represents the quality of your relationships with people at your institution.

- a. Relationships with **other students**
 Unfriendly, Unsupportive, Sense of alienation Friendly, Supportive, Sense of belonging
☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7
- b. Relationships with **faculty members**
 Unavailable, Unhelpful, Unsympathetic Available, Helpful, Sympathetic
☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7
- c. Relationships with **administrative personnel and offices**
 Unhelpful, Inconsiderate, Rigid Helpful, Considerate, Flexible
☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7

9 About how many hours do you spend in a typical 7-day week doing each of the following?

- a. Preparing for class (studying, reading, writing, doing homework or lab work, analyzing data, rehearsing, and other academic activities)
☐ 0 ☐ 1-5 ☐ 6-10 ☐ 11-15 ☐ 16-20 ☐ 21-25 ☐ 26-30 ☐ More than 30
- b. Working for pay **on campus**
☐ 0 ☐ 1-5 ☐ 6-10 ☐ 11-15 ☐ 16-20 ☐ 21-25 ☐ 26-30 ☐ More than 30

9 (cont'd) About how many hours do you spend in a typical 7-day week doing each of the following?

c. Working for pay **off campus**

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
0	1-5	6-10	11-15	16-20	21-25	26-30	More than 30

d. Participating in co-curricular activities (organizations, campus publications, student government, fraternity or sorority, intercollegiate or intramural sports, etc.)

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
0	1-5	6-10	11-15	16-20	21-25	26-30	More than 30

e. Relaxing and socializing (watching TV, partying, etc.)

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
0	1-5	6-10	11-15	16-20	21-25	26-30	More than 30

f. Providing care for dependents living with you (parents, children, spouse, etc.)

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
0	1-5	6-10	11-15	16-20	21-25	26-30	More than 30

g. Commuting to class (driving, walking, etc.)

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
0	1-5	6-10	11-15	16-20	21-25	26-30	More than 30

10 To what extent does your institution emphasize each of the following?

	Very much	Quite a bit	Some	Very little
a. Spending significant amounts of time studying and on academic work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Providing the support you need to help you succeed academically	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Encouraging contact among students from different economic, social, and racial or ethnic backgrounds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Helping you cope with your non-academic responsibilities (work, family, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Providing the support you need to thrive socially	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Attending campus events and activities (special speakers, cultural performances, athletic events, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Using computers in academic work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

11 To what extent has your experience at this institution contributed to your knowledge, skills, and personal development in the following areas?

	Very much	Quite a bit	Some	Very little
a. Acquiring a broad general education	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Acquiring job or work-related knowledge and skills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Writing clearly and effectively	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Speaking clearly and effectively	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Thinking critically and analytically	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

11 (cont'd) To what extent has your experience at this institution contributed to your knowledge, skills, and personal development in the following areas?

	Very much	Quite a bit	Some	Very little
f. Analyzing quantitative problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Using computing and information technology	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. Working effectively with others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. Voting in local, state, or national elections	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j. Learning effectively on your own	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k. Understanding yourself	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
l. Understanding people of other racial and ethnic backgrounds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
m. Solving complex real-world problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
n. Developing a personal code of values and ethics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
o. Contributing to the welfare of your community	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
p. Developing a deepened sense of spirituality	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

12 Overall, how would you evaluate the quality of academic advising you have received at your institution?

☐ Excellent
☐ Good
☐ Fair
☐ Poor

13 How would you evaluate your entire educational experience at this institution?

☐ Excellent
☐ Good
☐ Fair
☐ Poor

14 If you could start over again, would you go to the same institution you are now attending?

☐ Definitely yes
☐ Probably yes
☐ Probably no
☐ Definitely no

15 Write in your year of birth:

1	9		
---	---	--	--

16 Your sex:

☐ Male ☐ Female

17 Are you an international student or foreign national?

☐ Yes ☐ No

18 What is your racial or ethnic identification? (Mark only one.)

- ☐ American Indian or other Native American
☐ Asian, Asian American, or Pacific Islander
☐ Black or African American
☐ White (non-Hispanic)
☐ Mexican or Mexican American
☐ Puerto Rican
☐ Other Hispanic or Latino
☐ Multiracial
☐ Other
☐ I prefer not to respond

19 What is your current classification in college?

- ☐ Freshman/first-year ☐ Senior
☐ Sophomore ☐ Unclassified
☐ Junior

20 Did you begin college at your current institution or elsewhere?

- ☐ Started here ☐ Started elsewhere

21 Since graduating from high school, which of the following types of schools have you attended other than the one you are attending now? (Mark all that apply.)

- ☐ Vocational or technical school
☐ Community or junior college
☐ 4-year college other than this one
☐ None
☐ Other

w1 Are you a current or former member of the U.S. Armed Forces, Reserves, or National Guard?

- ☐ Yes ☐ No (Go to question 22.)

As part of your military experience, did you receive combat pay, hostile fire pay, or imminent danger pay?

- ☐ Yes ☐ No

22 Thinking about this current academic term, how would you characterize your enrollment?

- ☐ Full-time ☐ Less than full-time

w2 Thinking about this current academic term, are you taking all courses entirely online?

- ☐ Yes ☐ No

23 Are you a member of a social fraternity or sorority?

- ☐ Yes ☐ No

24 Are you a student-athlete on a team sponsored by your institution's athletics department?

- ☐ Yes ☐ No (Go to question 25.)

On what team(s) are you an athlete (e.g., football, swimming)? Please answer below:

Your institution will not receive your identified response to the following question. Only an overall summary of responses will be provided.

w3 Do you have any of the following impairments or disabilities? (Mark all that apply.)

- ☐ No, I do not have any disabilities or impairments
☐ Yes, I have a sensory impairment (vision or hearing)
☐ Yes, I have a mobility impairment
☐ Yes, I have a learning disability
☐ Yes, I have a developmental disorder (ADHD, Autism spectrum disorder, etc.)
☐ Yes, I have a mental health disorder
☐ Yes, I have a medical disability not listed above
☐ Yes, I have another type of disability
☐ I choose not to answer

If yes:

Please specify your disabilities or impairments:

25 What have most of your grades been up to now at this institution?

- ☐ A ☐ B+ ☐ C+
☐ A- ☐ B ☐ C
☐ B- ☐ C- or lower

26 Which of the following best describes where you are living now while attending college?

- ☐ Dormitory or other campus housing (not fraternity/sorority house)
☐ Residence (house, apartment, etc.) within walking distance of the institution
☐ Residence (house, apartment, etc.) within driving distance of the institution
☐ Fraternity or sorority house
☐ None of the above

27 What is the highest level of education that your parent(s) completed? (Mark one box per column.)

- | Father | Mother |
|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> Did not finish high school |
| <input type="checkbox"/> | <input type="checkbox"/> Graduated from high school |
| <input type="checkbox"/> | <input type="checkbox"/> Attended college but did not complete degree |
| <input type="checkbox"/> | <input type="checkbox"/> Completed an associate's degree (A.A., A.S., etc.) |
| <input type="checkbox"/> | <input type="checkbox"/> Completed a bachelor's degree (B.A., B.S., etc.) |
| <input type="checkbox"/> | <input type="checkbox"/> Completed a master's degree (M.A., M.S., etc.) |
| <input type="checkbox"/> | <input type="checkbox"/> Completed a doctoral degree (Ph.D., J.D., M.D., etc.) |

28 Please print your major(s) or your expected major(s).

a. Primary major (Print only one.):

b. If applicable, second major (not minor, concentration, etc.):

Appendix D- Northeastern Illinois University NSSE Respondent Characteristics



NSSE 2010 Respondent Characteristics Northeastern Illinois University

	NEIU		Urban Universities		Selected Peers		NSSE 2010	
	FY	SR	FY	SR	FY	SR	FY	SR
Response Rate^a								
Overall	39%		27%		24%		32%	
By class	38%	41%	24%	30%	19%	27%	30%	33%
NSSE sample size ^b	1,023	1,719	16,637	13,579	6,513	9,349	558,613	583,595
Sampling Error^c								
Overall	2.3%		1.0%		1.5%		0.1%	
By class	3.9%	2.9%	1.4%	1.3%	2.6%	1.7%	0.2%	0.2%
Number of respondents ^b	385	697	3,961	4,101	1,212	2,531	165,561	194,824
Total population	1,023	1,781	19,019	14,403	10,068	11,382	587,295	614,425
Student Characteristics^d								
<i>Mode of Completion</i>								
Paper	0%	0%	1%	2%	7%	5%	1%	1%
Web	100%	100%	99%	98%	93%	95%	99%	99%
<i>Enrollment Status^e</i>								
Full-time	89%	60%	90%	78%	87%	70%	95%	84%
Less than full-time	11%	40%	10%	22%	13%	30%	5%	16%
<i>Gender^e</i>								
Female	63%	68%	65%	63%	66%	69%	64%	64%
Male	37%	32%	35%	37%	34%	31%	36%	36%
<i>Race/Ethnicity</i>								
Am. Indian/Native American	0%	0%	1%	1%	0%	0%	1%	1%
Asian/Asian Am./Pacific Isl.	15%	9%	5%	4%	3%	4%	7%	5%
Black/African American	3%	9%	14%	11%	7%	8%	9%	8%
White (non-Hispanic)	28%	47%	64%	68%	12%	16%	66%	68%
Mexican/Mexican American	21%	14%	3%	2%	44%	42%	3%	3%
Puerto Rican	8%	4%	1%	1%	1%	1%	1%	1%
Other Hispanic or Latino	10%	3%	2%	2%	25%	19%	3%	3%
Multiracial	6%	4%	3%	3%	2%	2%	3%	3%
Other	4%	2%	2%	2%	2%	2%	1%	1%
I prefer not to respond	5%	8%	5%	7%	4%	6%	5%	6%
<i>International Student</i>	15%	10%	6%	4%	11%	8%	6%	5%
<i>Place of Residence</i>								
On-campus ^f	1%	0%	35%	7%	12%	2%	67%	16%
<i>Transfer Status</i>								
Transfer students	9%	77%	14%	50%	12%	51%	9%	43%
<i>Age</i>								
Non-traditional (24 or older)	9%	68%	18%	56%	18%	65%	7%	35%
Traditional (less than 24)	91%	32%	82%	44%	82%	35%	93%	65%

^a Response rate (number of respondents divided by sample size) is adjusted for non-deliverable mailing addresses, students for whom contact information was not available, and other students who were sampled yet unavailable during the survey administration.

^b This report is based on information from all randomly selected students for both your institution and your comparison institutions. Targeted and locally administered oversamples (i.e., non-randomly selected students) are not included in this report.

^c Sampling error is an estimate of the margin by which the *true* score for your institution on a given item could differ from the reported score. To interpret the sampling error, assume that 60% of your students reply "very often" to a particular item. If the sampling error is +/-5%, then the true population value is most likely between 55% and 65%.

^d Percent of total respondents within each category. These results are *not* weighted.

^e Institution-reported data. This information was used to weight your Mean Comparisons, Frequency Distributions, and Benchmark Comparisons reports.

^f Students who identified their residence as "dormitory or other campus housing" or "fraternity or sorority house."

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